

QH  
1  
N2855  
no. 1-2  
SI

Naturalists' Society of  
New South Wales, Sydney.  
Memoirs ...  
Nos. 1-2

1903-04

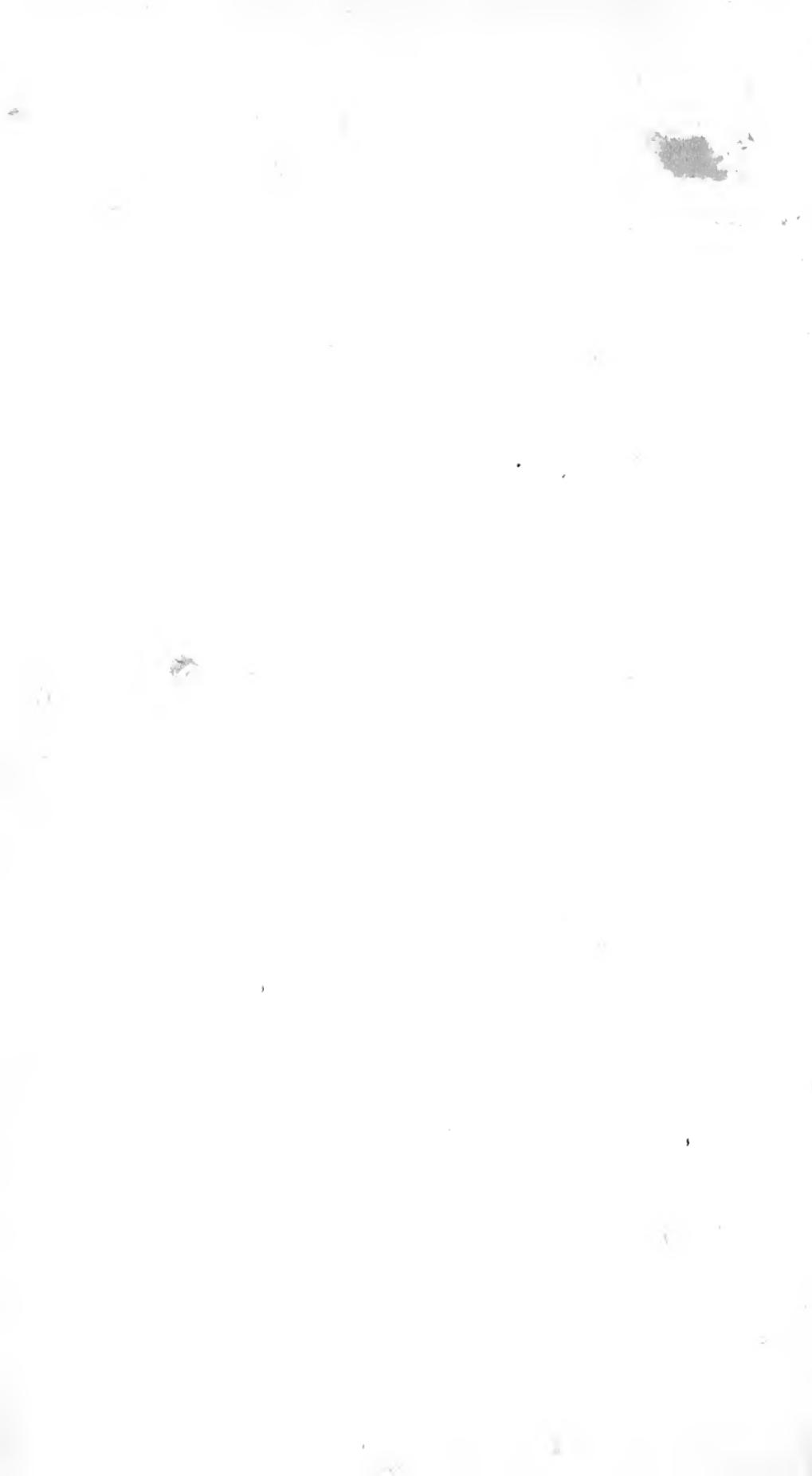


Glass \_\_\_\_\_

Book \_\_\_\_\_

SMITHSONIAN DEPOSIT





F.D. 1903

# MEMOIRS

OF THE

## New South Wales Naturalists' Club

NO. I.

---

## A CATALOGUE

OF THE

## RHOPALOCERA OF AUSTRALIA

BY

G. A. WATERHOUSE, B.Sc., F.E.S.

---

PRICE TWO SHILLINGS.

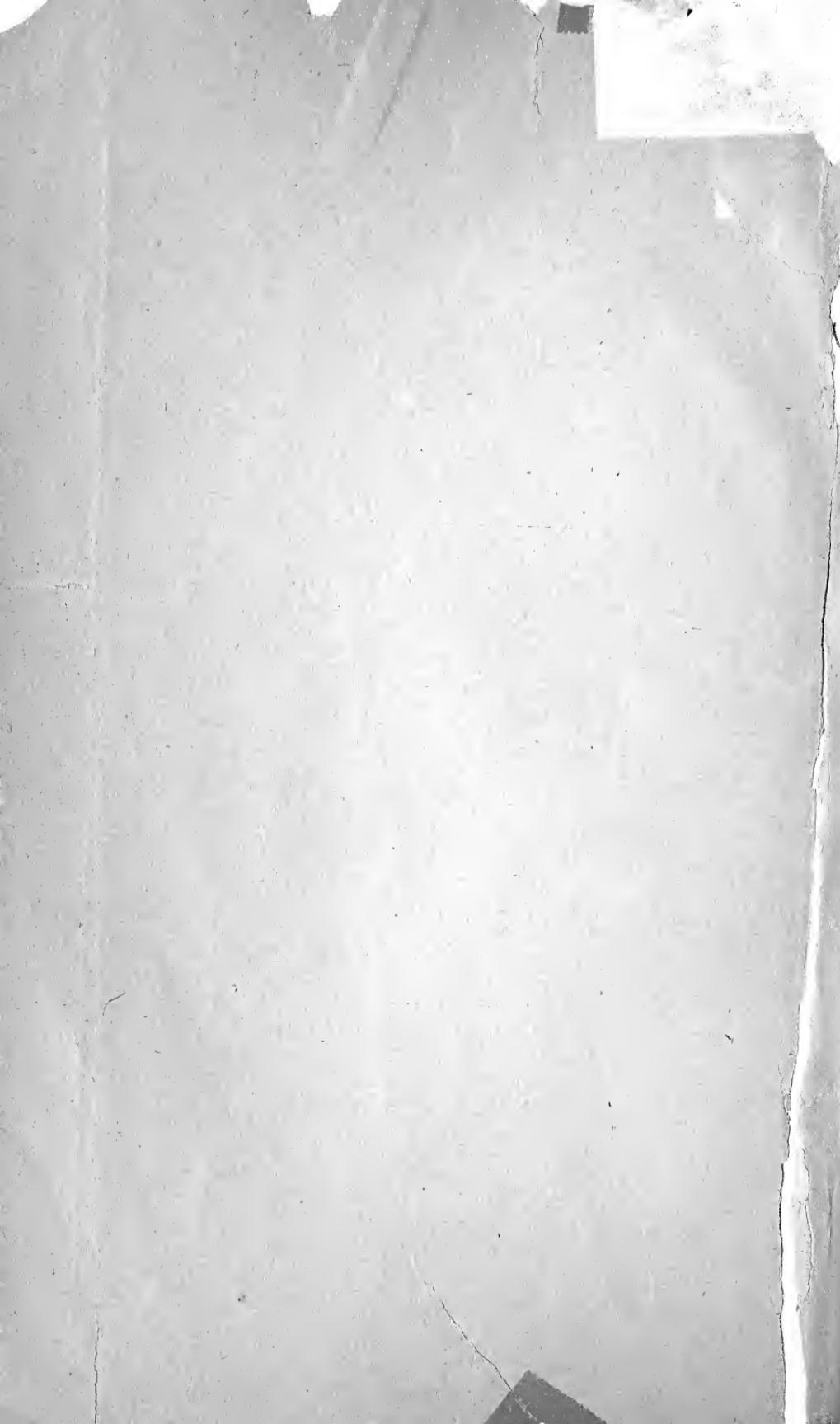
---



SYDNEY :

1ST OCTOBER. 1903.

20c set



Naturalists' society of New South Wales,  
" Sydney.

QH

1  
N 2855

# MEMOIRS

No. 1-2

NH

OF THE

## New South Wales Naturalists' Club,

No. 1. - 2.

---

# CATALOGUE

OF THE

## RHOPALOCERA OF AUSTRALIA

BY

G. A. WATERHOUSE, B.Sc., B.E., F.E.S.

---

PRICE TWO SHILLINGS.

---

SYDNEY:

1ST OCTOBER, 1903.

1903 - 1904

FEB 1 1904



## INTRODUCTION.

---

IN preparing this list of the species of the known Rhopalocera of Australia, I have endeavoured to keep two objects in view. Firstly, to produce a list whereby an entomologist in Australia may have a ready reference to the best descriptions and figures to be found in works known to be in Australian libraries. Secondly, to indicate to entomologists outside Australia what forms are recognisable amongst the vast assemblage of, reputed or unrecognised species, resulting from the bad descriptions of the past. I have sunk as synonyms species such as *Xenica ella*, which may in the future have to be regarded as varieties, but of which the number of specimens known is too few to form any definite opinion upon.

I have not included a list of unrecognised species, as these mainly occur amongst the *Hesperiidae*, and a full list is given by Meyrick and Lower (R.A.H.) in Proc. Roy. Soc. S.A. 1902. Miskin also in his Catalogue gives a few, but with these exceptions all, I believe, of the recorded Australian species are included here.

With regard to No.'s. 7, 13, 16, 17, 89, 101, 247, 265, 328, I have only seen the descriptions, and of 97, 106, 120, 184, 188, 297, I have seen figures and descriptions. The remainder represent species that are recognised in Australia, of which 283 species are contained in my own cabinets, and the other 31 species in the collections of the Queensland, Macleay, and Australian Museums, and of Messrs. R. E. Turner, G. Lyell, junr., R. Illidge, J. A. Kershaw and O. B. Lower, who with Messrs. A. B. Bell, F. Brown, J. F. Haase and Dr. A. J. Turner have given me many notes as to localities.

Prior to Kirby's Catalogue in 1871, no list of Australian Butterflies had been published, if we except the descriptions and figures of Donovan in 1805. In 1873 my esteemed friend and early instructor, Mr. Geo. Masters, issued a list taken mainly from Kirby with corrections and additions from his own collections. In 1878 Semper gave an excellent list of the butterflies of Eastern Australia from the Godeffroy Collection. This is very valuable, as many first determinations occur in it. In 1891 Miskin published his valuable Synonymical Catalogue, which gives a vast mass of references, but unfortunately with

too many unrecognised species. With a much more extensive collection, and after an examination of the Miskin Collection in the Queensland Museum, I am able to reduce the unrecognised species very considerably, and have also to add the many new species described since 1891.

It will be noticed that many changes are made in the genera. These are made mainly on the authority of the late Mr. L. de Nicéville, to whom Mr. R. E. Turner and myself submitted a large amount of material. Mr. H. H. Druce, by his published writings and letters, has elucidated many difficult points.

The habitat given, unless otherwise stated, must be taken to apply to the coastal strip of 150 miles or thereabouts, for very few species are found further inland. Mr. O. B. Lower has taken No's. 5, 30, 31, 33, 138, 151, 158, 167, 199, 212, 220, 238, at Broken Hill, and Mr. H. L. Kesteven No's. 130, 138, 167, 199, 206, 212 at Bourke.

That a great deal of work has yet to be done, is only too apparent, and some of the difficulty is caused by the same species being known under different names in different States; and often two species pass under the same name. In this connection, I will be only too pleased to determine any specimens sent to me, and will give full references to the bibliography of the species if desired.

When better collections are made, particularly of Northern forms, with authentic dates and localities, the study of distribution of species and seasonal change will be greatly aided. Especially amongst the *Pieridae* is seasonal change noticeable. I am sure it also exists in the other families, but so few collections are accurately dated, and some are even without localities, which is very vicious.

In addition to writings of de Nicéville, Druce, and Miskin, I have used Kirby in giving the descriptions of the families.

To anyone working at this group, the references I give will be sufficient, but a further very extensive list is given by Miskin's Catalogue in the Annals of the Queensland Museum, where most of the abbreviations used in this present list will be found. Miskin added greatly to our knowledge of Australian Butterflies, and if the work of other writers both in and out of Australia had been but half as good, the confusion of unrecognised species, which I hope this present list will help to clear away, would not have arisen.

G. A. WATERHOUSE.

SYDNEY, 5th August, 1903.

## PRINCIPAL ABBREVIATIONS:

(For others, see Miskin's Catalogue.)

---

*Ann. Mag. Nat. Hist.*—“Annals and Magazine of Natural History.”

*Aust. Butt.*—“Australian Butterflies,” by A. S. Olliff, 1889.

*Butt Ind.*—“Butterflies of India, Burmah and Ceylon,” by Marshall and de Nicéville. Vol. iii. “*Lycenidæ*” by de Nicéville.

*Gen. Diurn. Lep.*—“The Genera of Diurnal Lepidoptera,” by Doubleday, Westwood and Hewitson, 1846-52.

*Journ. Linn. Soc. Lond.*—“Journal of the Linnean Society of London.”

*Lep. Cey.*—“The Lepidoptera of Ceylon” by F. Moore, 1880-1.

*Miskin's Catalogue.*—“Synonymical Catalogue of the Rhopalocera of Australia, 1891,” by W. H. Miskin. Annals of the Queensland Museum, No. 1.

*P.L.S.N.S.W.*—“Proceedings of the Linnean Society of N.S. Wales.”

*P.Z.S.*—“Proceedings of the Zoological Society of London.”

*Trans. Ent. Soc. Lond.*—“Transactions of the Entomological Society of London.”

*R.A.H.*—“Revision of the Australian *Hesperiadæ*,” by Meyrick & Lower, Proc. Roy. Soc. S.A., 1902.

*Vict. Butt.*—“Victorian Butterflies,” by Anderson & Spry, pt. i., 1893; pt. ii., 1894.

*Vict. Nat.*—“The Victorian Naturalist,” Melbourne.

*W.*—“Notes on Australian *Lycenidæ*, Part. III.—Revisional,” by G. A. Waterhouse, P.L.S.N.S.W. 1903.



# RHOPALOCERA.

---

## Family NYMPHALIDÆ.

Front legs imperfect in both sexes; those in the male with only one or two tarsal joints; those in the female usually with four or five joints: imagines rarely of small size. Pupa generally suspended by the tail.

### Sub-Family DANAINÆ.

*Ovum*—Much longer than wide, leathery, radiate, with numerous broad flattened ribs and distinct cross-lines, reticulate over a small area at apex.

*Larva*—Smooth, with long fleshy appendages.

*Pupa*—Suspended by tail, short, stout, often metallic.

*Imago*—Large; wings generally entire, sometimes slightly scalloped, but never tailed; the wing-cells closed. Male often with conspicuous patches of raised scales on various parts of the wings.

#### 1. DANAUS, Linné.

Syst. Nat. x. pp. 458, 468, 1758; Latr. Gen. Crust. Ins. iv. p. 201, 1809; Butler P.Z.S. 1866, pp. 43, 171; Moore l.c. 1883, pp. 223-252.

Sometimes this is regarded as one large genus, and as such is split up into a number of sub-genera. Some authors consider these sub-genera as of equal rank to *Danaus*, which then takes the place of the sub-genus *Salatura*. I have indicated by parentheses the various sub-genera to which our Australian species belong.

1. D. (SALATURA) PLEXIPPUS, Linn. Syst. Nat. x. p. 471, 1758; *Papilio genutia*, Cram. Pap. Exot. iii. pl. 206, f. c. d. 1779; *Danais genutia*, Marsh. & de Nicév. Butt. Ind. i. pp. 7, 52, 1882.

This is the species recorded in Miskin's Catalogue under Cramer's name *genutia*, but there seems little doubt that this is the true *plexippus* of Linnaeus. Two distinct sub-species are recognisable in Australia. The indigenous form in N.W. Australia is small and almost identical with *S. laratensis* Butl., from Timor; while the form at Cairns is allied to the Chinese sub-species, and is a very recent introduction.

*Hab.* Cairns, N.W. Australia, Port Darwin.

- D. (SALATURA) AFFINIS, Fabr. Syst. Ent. p. 511, 1775 ;  
*S. nigrita*, Moore P.Z.S., 1883, p. 243.  
*Hab.* Clarence R. to Cape York, Port Darwin, Hunter R.?
- D. (SALATURA) MYTILENE, Feld. Wien Ent. Mon. iv. p. 232, 1860 ; *D. pullata*, Butler P.Z.S. 1866, p. 47, f. 1.  
*Hab.* N. Queensland.
- D. (ANOSIA) MENIPPE, Hübn. Verz. bekannt. Schmett. p. 16, 1816.  
This is our large red species, which passes under many names : as *D. plexippus* in Aust. Butt. (fig. p. 10), and *D. erippus* in Miskin's Catalogue and Vict. Butt. (fig. p. 43). It is also known as *D. archippus*.  
*Hab.* Victoria, N.S. Wales, Queensland.
5. D. (LIMNAS) PETILIA, Stoll Suppt. Cramer's Pap. Exot. p. 132, pl. 28, f. 3, 1790 ; Vict. Butt. p. 41.  
This is the Australian form of *D. chrysippus*, Linn.  
*Hab.* S. Australia, Victoria, N.S. Wales, Queensland, Port Darwin.
- D. (TIRUMALA) HAMATA, MacL. King's Surv. Aust ii. p. 461, 1827 ; Oll. Aust. Butt. p. 11, 1889 ; *D. australis*, Blanch. Voy. Pol. Sud. Ins. p. 388, pl. 2, f. 5, 6, 1837-40.  
*Hab.* Sydney to Cape York, Port Darwin.

## 2. EUPLŒA, Fabricius.

Illiger's Mag. vi p 280, 1807 ; Butler P.Z.S. 1866, p. 268 ; Moore l.c. 1883, p 253-323 ; Misk. P.L.S. N.S.W., 1889, p. 1037.

I have been unable to obtain specimens of several of the species, for examination, so the sub-genera herein used can only be regarded as provisional ; the various notes will perhaps aid in determining the species.

*I.—No sexual brand on forewing in male ; no costal patch on hindwing.*

- E. (GAMATOBÄ) MONILIFERA (female), Moore P.Z.S. 1883, p. 262.  
*Hab.* Thursday Is.

- E. (GAMATOBÄ ?) EICHHORNI, Staud. Exot. Schmett. p. 53, pl. 26, 1885 ; *E. boreas*, Misk. P.L.S. N.S.W. 1889, p. 1043.

Miskin's species is undoubtedly identical with *eichhorni*, and perhaps both may have to sink under the previous species.

*Hab.* Cardwell, Cairns, Johnstone R.

- E. (VADEBRA ?) MISENUS, Misk. P.L.S. N.S.W. 1889, p. 1039.  
*Hab.* Cape York.

*II.—No sexual brand on forewing in male; costal patch on hindwing.*

10. E. (CALLIPLÖEA) NIVEATA, Butler Trans. Ent. Soc. Lond. 1875, p. 2.  
*Hab.* Mackay to C. York.
- E. (CALLIPLÖEA) TULLIOLUS, Fabr. Ent. Syst. iii. p. 41, 1793.  
*Hab.* Brisbane to Cape York.
- E. (CALLIPLÖEA) DARCHIA, Macl., King's Surv. Aust. ii. p. 462, 1827; *E. priapus*, Butler P.Z.S. 1866, p. 291, pl. 29, f. 2.  
*Hab.* Port Darwin, Port Essington.
- E. (CALLIPLÖEA) TURNERI, Butler Journ. Linn. Soc. Lond. Zool. 1878, p. 296 (female).  
*Hab.* Darnley Is.

*III.—One sexual brand on forewing in male; no costal patch on hindwing.*

- E. (CHANAPA) CORINNA, Macl., King's Surv. Aust. ii. p. 462, 1827; *E. euclus*, Misk. P.L.S. N.S.W. 1889, p. 1045.  
*Hab.* Sydney to Cape York, Port Darwin.
15. E. (CHANAPA ?) AMYCUS, Misk. P.L.S. N.S.W., 1889, p. 1044.  
*Hab.* Cape York.
- E. (DERAGENA), BOISDUVALII, Lucas, Rev. Zool. p. 321, 1853.  
A reputed species only.  
*Hab.* Australia.

*IV.—One sexual brand on forewing in male; costal patch on hindwing.*

- E. (SALPINX) VIRIDIS, Butler Ann. Mag. Nat. Hist. 1882, p. 38 (female).  
*Hab.* Thursday Is.
- E. (HIRDAPA) USIPETES, Hew. Exot. Butt. ii. *Eupl.* pl. 1, f. 4, 1858; *E. hippias*, Misk. P.L.S.N.S.W. 1889, p. 1040.  
*Hab.* Cape York.

*V.—Two sexual brands on forewing in male; no costal patch on hindwing.*

- E. (DORICHA) SYLVESTER, Fabr. Ent. Syst. iii. p. 41, 1793; *E. dardanus*, Misk. P.L.S. N.S.W. 1889, p. 1041.  
*Hab.*—Mackay to Cape York, Port Darwin.

20. E. (DORICHA ?) CRITHON, Misk. P.L.S. N.S.W. 1889, p. 1042.

*Hab.* Cape York.

3. TELLERVO, Kirby.

Hand-book Lep. vol. i. p. 28, 1896; *Humadyras*, Boisd. (*nec* Hüb.) Voy. Astr. Lep. p. 91, 1832 (*nom. præocc.*).

T. ZOILUS, Fabr. Syst. Ent. p. 480, 1775.

*Hab*—Cardwell to Cape York.

Sub-Family ACRÆINÆ.

*Ovum*—Resembling that of the *Danainæ*.

*Larva*—Cylindrical, gregarious, with branching spines.

*Pupa*—Long, slender, thorax angulated, abdomen sometimes with spines or filaments.

*Imago*—Of moderate size; antennæ strongly clubbed. Wings rounded, rather long, never dentated or tailed; wing cells closed; abdomen long, sometimes with a horny appendage in female.

4. ACRÆA, Fabricius.

Illiger's Mag. vi. p. 284, 1807.

A. ANDROMACHA, Fabr. Syst. Ent. p. 466, 1775; Oll. Aust. Butt. p. 13, 1889.

*Hab.* Sydney to Cape York.

Sub-Family NYMPHALINÆ.

*Ovum*—Very variable in form.

*Larva*—Spiny, or with fleshy prominences, feeds on low plants or shrubs.

*Pupa*—Generally more or less angular, rather long.

*Imago*—Generally of moderate size, rarely small; antennæ usually with a distinct club; wings ample, sometimes angulated or with a short tail; the cells, at least of the hind wings, open or closed by a rudimentary nervule; submedian nervure of forewing generally forked at the base.

5. CETHOSIA, Fabricius.

Illiger's Mag. vi. p. 280, 1807; Doubl. Gen. Diurn. Lep. p. 150, 1848; Moore Lep. Cey. p. 51, 1881.

C. CYDIPPE, Linn. Syst. Nat. i. p. 776, 1767; Oll. Aust. Butt. p. 14, 1889.

*Hab.* Mackay to Cape York.

This is the large red species which is recorded in Miskin's Catalogue as *C. chrysippe*, Fabr.

C. PENTHESILEA, Cram. Pap. Exot. ii. pl. 145, f. B.C., 1777.  
This is the smaller species from N.W. Australia.

*Hab.* Port Darwin.

NOTE.—*C. lamarckii* (Godt. Enc. Méth. ix. p. 249, 1819; Lucas Exot. Lep. pl. 54, f. 2, 1835) is a species with large blue areas on upperside according to the figure, but I very much doubt if it is Australian.

#### 6. CYNTHIA, Fabricius.

Illiger's Mag. vi. p. 281, 1807; Doubl. Gen. Diurn. Lep. p. 212, 1849.

25. C. ADA, M. R. Butler P.Z.S. 1873, p. 686.

*Hab.* Mackay to Cape York.

#### 7. ARGYNNIS, Fabricius.

Illiger's Mag. vi. p. 283, 1807; Latr. Enc. Méth. ix. p. 10, 1819; Doubl. Gen. Diurn. Lep. p. 171, 1848.

A. (ACIDALIA) INCONSTANS, Butler Cist. Ent. i. p. 164, 1873; Oll. Aust. Butt. p. 15, 1889.

*Hab.* Hunter R. to Rockhampton.

#### 8. CUPHA, Billberg.

Enum. Ins. p. 79, 1820; Moore Lep. Cey. p. 64, 1881; Dist. Rhop. Malay p. 176, 1882-6.

C. PROSOPE, Fabr. Syst. Ent. p. 504, 1775; Don. Ins. New Holl. pl. 27, f. 2, 1805; *Messaras prosope* in Miskin's Catalogue.

*Hab.* Richmond R. to Cape York, Thursday Is.

#### 9. ATELLA, Doubleday.

Gen. Diurn. Lep. p. 165, 1848; Moore Lep. Cey. p. 61, 1881.

A. EGISTA, Cram. Pap. Exot. iii. pl. 281, f. c, d, 1780;

*A. propinquua*, Misk. Trans. Ent. Soc. Lond. 1884, p. 94.

*Hab.* Cardwell, Cairns.

A. PHALANTA, Drury Ill. Exot. Ent. i, pl. 21, f. 1, 2, 1773.

*Hab.* Port Darwin.

#### 10. PYRAMEIS, Hübner.

Verz. bekannt. Schmett. p. 32, 33, 1816; Doubl. Gen. Diurn. Lep. p. 202, 1849.

30. P. ITEA, Fabr. Syst. Ent. p. 498, 1775; Don. Ins. New Holl. pl. 26, f. 1, 1805; Math. Trans. Ent. Soc. Lond. 1888, p. 145, pl. 6, f. 10; Vict. Butt. p. 68, 1893.

*Hab.* S.W. and S. Australia, Victoria, N.S. Wales, Brisbane to Mackay.

*Var.* LUCASII, Misk. P.L.S.N.S.W. 1888, p. 1515.  
*Hab.* Victoria.

P. KERSHAWI, McCoy Ann. Mag. Nat. Hist. 1868, p. 76;  
 And. & Spry Vict. Butt. p. 72, 1893.  
*Hab.* Throughout Australia.

*Var.* SUFFUSA, Oll. P.L.S N.S.W. 1888, p. 1250.  
*Hab.* Bombala, N.S.W.

#### 11. JUNONIA, Hübner.

Verz. bekannt. Schmett. p. 34, 35, 1816; Moore Lep. Cey. p. 40, 1880.

J. ALBICINCTA, Butler Trans. Ent. Soc. Lond. 1875, p. 5.  
*Hab.* Brisbane to Cape York.

J. VILLIDA, Fabr. Mant. Ins ii. p. 35, 1787; Don. Ins. New Holl. pl. 25, f. 3, 1805; Math. Trans. Ent. Soc. Lond. 1888, p. 146, pl. 6, f. 11; Vict. Butt. p. 76, 1893.  
*Hab.* Throughout Australia.

#### 12. PRECIS, Hübner.

Verz. bekannt. Schmett. p. 33, 1816; Dist. Rhop. Malay. p. 89, 1882-6.

P. ZELIMA, Fabr. Syst. Ent. p. 492, 1775; Don. Ins. New Holl. pl. 23, f. 2, 1805; Butler Cat. Fabr. Lep. B.M. p. 76, pl. 1, f. 6, 1869.  
*Hab.* Nerang R. to Cape York.

#### 13. RHINOPALPA, Felder.

Wien. Ent. Mon. iv. p. 399, 1860; Dist. Rhop. Malay. p. 97, 1882-6.

35. R. SABINA, Cram. Pap. Exot iv. pl. 289, f. a.-d., 1780;  
 Semper Reisen Philipp. ii. pl. a, f. 7, 1888.  
*Hab.* Cape York to Cooktown.

#### 14. DOLESCHALLIA, Felder.

Neues Lep. p. 14, 1861; Moore Lep. Cey. p. 38, 1880,  
 Dist. Rhop. Malay. p. 87, 1882-6.

D. AUSTRALIS, Feld. Reise Nov. Lep. iii. p. 405, pl. 51, f. 1, 2, 1867; Oll. Aust. Butt. p. 16, 1889.  
*Hab.* Richmond R. to Cape York

#### 15. HYPOLIMNAS, Hübner.

Verz. bekannt. Schmett. p. 45, 1816: *Diadema*, Boisd. Voy. Astr. Lep. p. 135, 1832.

H. BOLINA, Linn. Syst. Nat. x. p. 479, 1758; Math. Trans. Ent. Soc. Lond. p. 149, 1888; Don. (as *H. nerina*, Fabr.) Ins. New Holl. pl. 27, f. 1, 1805. Many varieties of this species are figured in Cramer's Pap. Exot. i. 1779.

*Hab.* Cape York to Sydney.

H. MISIPPUS, Linn. Mus. Ulr. p. 264, 1764; Dist. Rhop. Malay. p. 167, (pl. 12, f. 9, 11 male, pl. 15, f. 11 female), 1882-6; de Nicév. Butt Ind. ii p. 126, f. 85, 1886.

*Hab.* Cairns to Brisbane, Port Darwin.

H. ALIMENA, Linn. Syst. Nat. x p. 478, 1758; Cram. Pap. Exot. iii. pl. 221, f. A-C, 1780. Fruhstorfer Berl. Ent. Zeit. xlvi. 1903, p. 73, describes one of our forms as sub-sp. *lamina*.

*Hab.* Cape York to Brisbane.

#### 16. MYNES, Boisduval.

Voy. Astr. Lep. p. 129, 1832; Wall. Trans. Ent. Soc. Lond. 1869, p. 77.

40. M. GEOFFROYI, Guer. Voy. Coq. pl. 16, f. 1, 1829; Semper (as *M. guerinii*, Wall.) Mus. Godf. Lep. xiv. p. 153, pl. 9, f. 10-17, 1878.

Two forms of this species are known, one black, the other white on the underside in both sexes.

*Hab.* Cape York to Brisbane.

#### 17. NEPTIS, Fabricius.

Illiger's Mag. vi. p. 282, 1807; Moore P.Z.S. 1858, p. 3; Lep. Cey. p. 54, 1881.

N. SHEPHERDI, Moore P.Z.S. 1858, p. 8, pl. 50, f. 1; *N. latifasciata*, Butler Trans. Ent. Soc. Lond. 1875, p. 4.

*Hab.* Cape York to Richmond R.

N. STAUDINGEREANA, de Nicév. Journ. Bombay Nat. Hist. Soc. 1898, p. 139.

This is the Australian form of *N. praslini*, Boisd.

*Hab.* Cardwell to Cape York.

N. MOOREI, Macleay Proc. Ent. Soc. N.S.W. i., p. liii, 1866; *N. mortifacies*, Butler Trans. Ent. Soc. Lond. 1875, p. 5.

This is the Australian form of *N. renilia*, Linn. Macleay placed this species in another sub-family in genus *Hamadryas* (*Tellervo*).

*Hab.* Cape York.

N. (RAHINDA) CONSIMILIS, Boisd. Voy. Astr. Lep. p. 133, 1832.

*Hab.* Mackay to Cape York.

## 18. CHARAXES, Ochsenheimer.

Schmett. Eur. iv. p. 18, 1816; Butler Journ. Linn. Soc. Zool. 1896, p. 348-404.

45. C. SEMPRONIUS, Fabr. Ent. Syst. iii. p. 62, 1793; Oll. Aust. Butt. p. 18, 1889; *C. tyrtæus* Feld. Wien Ent. Mon. iii. p. 399, pl. 9, f. 3, 1859.

*Hab.* Sydney to Cairns, N.W. Australia.

*C. CAPHONTIS*, Hew. Exot. Butt. Char. pl. 3, f. 14, 15, 1863, has been several times referred to as an Australian species, as the type is said to have come from Port Denison. Mr. G. Masters states definitely that the type came from Fiji.

## Sub-Family SATYRINÆ.

*Ovum*—About as long as wide, rather small, hard, translucent smooth, faceted, subradiate, or (rarely) ringed.

*Larva*—Generally green, with a forked tail; smooth or slightly hairy; thickest in the middle and tapering at each end; feeds usually on grasses.

*Pupa*—Short, cylindrical, not angulated.

*Imago*—Of small or moderate size; wing cells closed; principal nervures of wings often thickened or inflated at base, wings almost always ornamented with ocellated spots beneath and sometimes above.

## 19. MYCALEYSIS, Hübner.

Verz. bekannt. Schmett. p. 54, 1816; Westw. Gen. Diurn., Lep. p. 392, 1851; Moore Trans. Ent. Soc. Lond. 1880, p. 163; Schatz Exot. Schmett. ii. p. 203, 1889.

M. (MYDOSAMA), TERMINUS, Fabr. Syst. Ent. p. 488, 1775; Don. Ins. New Holl. pl. 28, f. 4, 1805; Butler P.Z.S. 1867, p. 720, p. 718 f. 3, 3a.; *Papilio remulia*, Cram. Pap. Exot. iii. pl. 237, f. f, g, 1780.

*Hab.* Rockhampton to Cape York.

M. (MYDOSAMA) SIRIUS, Fabr. Syst. Ent. p. 488, 1775; Don. Ins. New Holl. pl. 28, f. 3, 1805; Butler P.Z.S. 1867, p. 721, p. 718 f 1; *Satyrus manipa*, Boisd. Voy. Astr. Lep. p. 150, 1832.

*Hab.* Mackay to Cape York.

M. (CALYSISME) PERSEUS, Fabr. Syst. Ent. p. 488, 1775; Don. Ins. New Holl. pl. 26, f 3, 1805; Butler, P.Z.S., p. 719, p. 718 f. 2, 1867.

*M. zia*, Butler, Entom. 1869, p. 347, is probably the Australian form of this species.

*Hab.* N. Queensland.

M. (CALYSISME?) INFUSCATA, Macleay Proc. Ent. Soc. N.S.W. p. liii., 1866.  
*Hab.* Cape York, Port Darwin.

50. M. (ORSOTRIENA) MEDUS, Fabr., Syst. Ent. p. 488, 1775 ;  
*M. modestus* (part), Misk. P.L.S. N.S.W. 1890, p. 29.  
*Hab.* Cooktown to Thursday Is.

#### 20. MELANITIS, Fabricius.

Illiger's Mag. vi. p. 282, 1807 ; Moore Lep. Cey. i. p. 14, 1880.

M. LEDA, Linn. Syst. Nat. p. 474, 1758 ; Don. (as *P. banksia*, Fabr.) Ins. New. Holl. pl. 25, f. 1, 1805.

This is one of the most variable butterflies known, and I do not see how a separation into two species can be made of the many Australian forms.

*Hab.* Cape York to Sydney.

#### 21. TISIPHONE, Hübner.

Verz. bekannt. Schmett., p. 60, 1816 ; Miskin places these species under *Epinephile* Hübn., an European genus.

T. ABEONA, Don. Ins. New Holl. pl. 22, f. 1, 1805 ; Staud. Exot. Schmett. pl. 81, 1887 ; Math. Trans. Ent. Soc. Lond. 1888, p. 141, pl 6, f. 8 ; Vict. Butt. p. 56, 1893 ; *T. zelinda*, Hübn. Verz. bekannt. Schmett. p. 60, 1816.  
*Hab.* Victoria, N.S. Wales to Newcastle.

T. JOANNA, Butler Ann. Mag. Nat. Hist. 1866, p. 286 ; l. c. 1867, pl. 4, f. 8.

The larva and pupa are indistinguishable from *T. abeona*.

*Hab.* Clarence R. to Nerang R.

Var. RAWNSLEYI, Misk. Trans. Ent. Soc. Lond. 1870, p. 454.  
This form has the white bands wanting.

*Hab.* S. Queensland.

T. HELENA, Oll. P.L.S.N.S.W. 1888, p. 395 ; Aust. Butt. p. 21, 1889.

This is a mountain form.

*Hab.* Cairns district.

#### 22. YPTHIMA, Hübner.

Verz. bekannt. Schmett. p. 63, 1816 ; Schatz & Röber Exot. Schmett. ii. p 210. 1889.

55. Y. ARCTOUS, Fabr. Syst. Ent. p. 489, 1775 ; Don. Ins. New Holl. pl. 24, f. 2, 1805.

In the copy of the latter work at the Linnean Society, Sydney, the colouring of figure of underside is pink in error for brown.

*Hab.* Sydney to Cape York, Port Darwin.

## 23. HYPOCYSTA, Westwood.

Gen. Diurn. Lep. p. 397, 1851.

In a recent letter, Mr H. H. Druce, who has kindly compared specimens I sent with the types, says that *H. epirius* and *H. undulata* are not sufficiently distinct to warrant their being accepted as species.

*H. EUPHEMIA*, West. Gen. Diurn. Lep. p. 398, pl. 67, f. 3, 1850-2.

*Hab.* Sydney, Victoria?

*H. ADIANTE*, Hübn. Zutrag. Exot. Schmett. f. 545, 546, 1825; *H. undulata*, Butl. Trans. Ent. Soc. Lond. 1875, p. 2.

*Hab.* Sydney to Cape York, N.W. Australia.

*H. ANTIRIUS*, Butl. B. M. Cat. Sat. p. 168, pl. 4, f. 9, 1868.

Mr. Druce writes: This is allied to *H. adiante*.

*Hab.* N.W. Australia, Port Darwin.

*H. IRIUS*, Fabr. Syst. Ent. p. 487, 1775; Don. Ins. New Holl. pl. 28, f. 1, 1805.

*Hab.* Brisbane to Cape York.

60. *H. METIRIUS*, Butl. Trans. Ent. Soc. Lond. 1875, p. 3.

*Hab.* Sydney to Cairns.

*H. PSEUDIRIUS*, Butl. Trans. Ent. Soc. Lond. 1875, p. 3;

*H. epirius*, Butl. l.c. 1875, p. 4.

*Hab.* Sydney to Cairns.

## 24. HETERONYMPHA, Wallengren.

Svensk. Akad. Forh. p. 79, 1858; And. & Spry Vict. Butt. p. 58, 1893; Waterhouse P.L.S.N.S.W. 1897, p. 240.

*H. MEROPÉ*, Fabr. Syst. Ent. p. 495, 1775; Don. Ins. New Holl. pl. 28, f. 2, 1805 (female); Vict. Butt. p. 59, 1893.

Dr. Staudinger figures the male under the name *H. philerope*.

*Hab.* S. Australia, Tasmania, Victoria, N.S. Wales, Brisbane.

*Var. SUFFUSA*, Skuse. Trans. Ent. Soc. Lond. 1895.

*Hab.* Bowral, N.S.W., Victoria.

*H. DUBOULAYI*, Butler Ann. Mag. Nat. Hist. 1867, p. 167.

The West Australian form of *H. merope*.

*H. MIRIFICA*, Butler Ann. Mag. Nat. Hist. 1866, p. 286; l.c. 1867, p. 127, pl. 3, f. 1; *H. digglesi*, Misk. Trans. Ent. Soc. Lond. 1876, p. 454.

*Hab.* Sydney to Brisbane.

65. H. PHILEROPE, Boisd. Voy. Astr. Lep. p. 147, 1832; Butler Ann. Mag. Nat. Hist. 1867, pl. 3, f. 2; Vict. Butt. p. 62, 1893.

*Hab.* W. Australia, Victoria, Tasmania, N.S. Wales.

- H. PARADELPHA, Lower Trans Roy. Soc. S.A. 1893, p. 146; Vict. Butt. p. 65, 1893.

*Hab.* Victoria, N.S.W. to Sydney.

- H. BANKSII, Leach Zool. Misc. i. p. 28, pl. 10, f. 1, 2, 1814; Vict. Butt. p. 63, 1893; *H. affinis*, Lucas P.L.S.N.S.W. 1889, 1065.

*Hab.* Victoria, N. S. Wales, Brisbane.

- H. CORDACE, Hübn. Zutrag. Exot. Schmett. f. 798, 799, 1832; Vict. Butt. p. 66, 1893.

*Hab.* Victoria, N. S. Wales.

#### 25. XENICA, Westwood.

- Gen. Diurn. Lep. p. 387, note, 1851; Butler Trans. Ent. Soc. Lond. 1875, p. 8; Oll. P.L.S.N.S.W. 1887, p. 976, note.

- X. ACHANTA, Don. Ins. New Holl. pl. 22, f. 2, 1805; Staud. Exot. Schmett. pl. 81, 1887; Vict. Butt. p. 48, 1893; *Lassiomata ocrea*, Guest Trans. Roy. Soc. S.A. 1882, p. 35.

*Hab.* S. Australia, Victoria, N.S. Wales, S. Queensland.

70. X. KLUGII, Guer. Voy. Coq. pl. 17, f. 2, 1829; Vict. Butt. p. 49, 1893.

*Hab.* S.W. and S. Australia, Victoria, N.S. Wales, Tasmania.

- X. HOBARTIA, Westw. Gen. Diurn. Lep. p. 387, 1851; Vict. Butt. p. 51, 1893

*Hab.* Victoria, N.S. Wales to Sydney, Tasmania.

- X. TASMANICA, Lyell Vict. Nat. 1900, p. 110, fig.  
*Hab.* Tasmania.

- X. KERSHAWI, Misk. Trans. Ent. Soc. Lond. 1876, p. 452; Vict. Butt. p. 54, 1893.

I can only regard *X. ella*, Oll. P.L.S.N.S.W. 1887, p. 976, at most as a variety of this species.

*Hab.* Victoria, Liverpool Plains, N.S.W.

- X. LATHONIELLA, Westw. Gen. Diurn. Lep. p. 387, note, 1851; Butler Ann. Mag. Nat. Hist. 1867, pl. 4, f. 6; Oll. Aust. Butt. p. 20, 1889; Vict. Butt. p. 52, 1893.

*Hab.* Tasmania, Victoria, N.S. Wales to Hunter R. (inland).

75. *X. ORICHORA*, Meyr. Ent. Mo. Mag. 1885, p. 82.

This is the mountain form of *X. lathoniella*. *X. paludosa*, Lucas Proc. Roy. Soc. Q'ld. 1891, p. 4, from Tasmania, is probably only a small variety.

*Hab.* Tasmania, Victoria, N.S. Wales.

- X. CORREEÆ*, Oll. P.L.S.N.S.W. 1889, p. 621; Vict. Butt. p. 55, 1893.

From a careful examination of about 200 specimens, I can only regard var. *fulva*, Oll., as the male of this species. I have never seen a female *fulva*.

*Hab.* Victoria, N.S. Wales.

- X. LEPREA*, Hew. Trans. Ent. Soc. Lond. 1864, p. 249, pl. 16, f. 6, 7.

*Hab.* Tasmania.

---

### Family LIBYTHEIDÆ.

*Ovum*—Ampulliform, ridged, twice as long as broad (Doherty). Regularly elliptic, with sharply-rounded prominent longitudinal ribs (Scudder).

*Larva*—Cylindrical, slightly pubescent, segments with four transverse divisions; head small, rounded.

*Pupa*—Rather stout, ridged, suspended by the tail only.

*Imago*—Of moderate size, with angulated and dentated wings.

Palpi very long, about four times as long as the head. Front legs in male very small, the tarsi reduced to a single joint, without claws; front legs of the female almost perfectly developed.

#### 26. Genus LIBYTHEA, Fabricius.

Ill. Mag. vi. p. 284, 1807; Westw. Gen. Diurn. Lep. p. 412, 1851; Schatz and Röber Exot. Schmett. ii. p. 226, 1892.

*L. NICEVILLEI*, Oll. P.L.S.N.S.W. 1891, p. 28; *L. myrrha*, in Aust. Butt. and Miskin's Catalogue.

---

### Family LEMONIDÆ.

As only one species of this family has so far been found, I merely give the characters of the sub-family to which it belongs.

#### Sub-Family NEMEOBIINÆ

*Ovum*—More or less rounded, smooth, and slightly reticulated or granular.

*Larva*—Short, somewhat onisciform, though longer than in the *Lycænidæ*, and set with small hairy warts.

*Pupa*—Short, obtuse, rounded, slightly hairy, attached by the tail and a girdle round the middle.

*Imago*—Wings broad, rather short, forewings with the sub-costal nervure three, four or five branched; cells closed; hindwings with no basal nervure and with the sub-costal nervure and upper discoidal nervure rising from a common stalk.

#### 27. ABISARA, Felder.

Wien Ent. Mon. iv. p. 397, 1860; *Sospita* Hew. Exot. Butt. ii. *Sosp.* t. 1, 1861.

A. SEGECKIA, Hew. Exot. Butt. ii., *Sosp.* t. 1, f. 4-6, 1861.

### Family LYCÆNIDÆ.

*Ovum*—Very variable, sometimes nearly spherical, sometimes echinoid or semi-echinoid, sometimes punctated, at other times smooth.

*Larva*—Onisciform, sometimes smooth, or clothed with a short down, sometimes with fascicles of short bristles or regularly-disposed tubercles; head small, retractile; habits sluggish, usually night feeders, hiding by day in crevices or even in ants' nests; in most cases attended by ants; sometimes gregarious; sometimes, though rarely, carnivorous; very often feeding in the buds or seed-pods of leguminous plants.

*Pupa*—Short, thick, usually smooth; usually attached by the tail and a girdle round the middle of the body; found under pieces of bark or stones, in cracks, in ants' nests, or rarely just under the surface of the soil.

*Imago*—Usually of small size, of delicate structure and often of exquisite colour. Forelegs somewhat smaller than the rest, but nearly alike in both sexes. Forewing with the sub-costal nervule emitting two, three or rarely four branches; discoidal cell narrow; upper discocellular nervule wanting. Hindwing sometimes tailed and sometimes with a well developed anal lobe.

The Australian species of this family have been recently revised by myself in the Linnean Society of N. S. Wales (1903). so it is only necessary for me to quote the principal reference, give the synonyms and the reference to my own paper (W.), without mentioning the original genus of description.

A great deal of valuable work has yet to be done in this family by the collection of specimens, with accurate dates and

localities, and no doubt many new species will be added to the 115 species herein recorded.

28. **EUPSYCHELLUS**, Röber.

Tijdschr. Ent. xxxiv. p. 316; Exot. Schmett. Theil ii. p. 273, 1892; W. p. 138.

80. E. **DIONISIUS**, Boisd. Voy. Astr. Lep. p. 82, 1832; Druce, P.Z.S. 1891, p. 358, pl. 31, f. 1; W. p. 139, pl. 2, f. 1.  
*Hab.* Darnley Is.

29. **NEOPITHECOPS**, Distant.

Rhop. Malay. p. 209, 1884; W. p. 140: Syn. *Parapithecopis*, Moore.

- N. **ZALMORA**, Butl. Cat. Fabr. Lep. B.M. p. 161, 1869; de Nicév. Butt. Ind. iii. p. 53, 1890; W. p. 140, pl. 2, f. 2.  
 Syn. *dharma*, Moore; *gaura*, Moore; *horsfieldi*, Dist.  
*Hab.* Darnley Is.

30. **MEGISBA**, Moore.

Lep. Cey. i. p. 71, 1881; de Nicév. Butt. Ind. iii. p. 60, 1890; W. p. 142. Syn. *Pathalia*, Moore.

- M. **NIGRA**, Misk. P.L.S.N.S.W. 1890, p. 36; Waterh. l.c. 1902, p. 331; W. p. 142, pl. 2, f. 3, 4.  
*Hab.* Cardwell, Cairns, Cape York.

31. **CYANIRIS**, Dalman.

Kongl. Vetensk. Acad. Handl. xxxvii. pp. 63, 94, 1816; de Nicév. Butt. Ind. iii., p. 92, 1890; W. p. 143: Syn. *Lycænopsis*, Felder.

- C. **TENELLA**, Misk. Syn. Cat. Rhop. Aust. p. 63, 1891; W. p. 144, pl. 2, f. 11.  
*Hab.* Cairns.

32. **DANIS**, Fabricius.

Illiger's Mag. vi. p. 286, 1807; W. p. 146; *Thysanotis*, Hübn. Verz. bekannt. Schmett. p. 20, 1816; Druce & Baker P.Z.S. 1893, p. 536.

- D. **APOLLONIUS**, Feld. Reise Nov. Lep. ii. p. 265, pl. 33, f. 3, 1865; Druce & Baker P.Z.S. 1893, p. 541, pl. 45, f. 5, 6; W. p. 147, pl. 2, f. 8; *D. sebæ* of Misk. Cat.  
*Hab.* Cape York.

85. D. **SERAPIS**, Misk. Syn. Cat. Rhop. Aust. p. 49, 1891; Druce & Baker P.Z.S. 1893, p. 539, pl. 45, f. 1, 2; W. p. 150.  
*Hab.* Cairns, Cardwell.

D. SYRIUS, Misk. P.L.S.N.S.W. 1890, p. 34; W. p. 149.  
*Hab.* Cape York.

D. ARINIA, Ober. Ann. Mus. Gen. xii. p. 465, 1878; Druce & Baker P.Z.S. 1893, p. 550, pl. 46, f. 6, 7; W. p. 153; Syn. *albastola*, Lucas; *cyanea*, of Misk. Cat.

*Hab.* Mackay to Cape York.

D. TAYGETUS, Feld. Reise Nov. Lep. ii. p. 266, pl. 33, f. 19-21, 1865; W. p. 150. Syn. *salamandri*, Macleay.  
*Hab.* Richmond River to Cape York. Sydney (?)

D. MACLEAYI, Semp. Mus. Godf. Lep. xiv. p. 155, 1878; W. p. 152.  
*Hab.* Cape York.

### 33. LAMPIDES, Hübner.

Verz. bekannt. Schmett. p. 70, 1816; de Nicév. Butt. Ind. iii p. 159, 1890; W. p. 154.

90. L. ALEUAS, Feld. Reise Nov. Lep. ii. p. 268, pl. 33, f. 15, 16, 1865; W. p. 156. Syn. *alcas*, Felder.  
*Hab.* Darnley Is., Cooktown (?)

L. CŒLESTIS, Misk. Syn. Cat. Rhop. Aust. p. 50, 1891; W. p. 155.  
*Hab.* Cairns district.

### 34. MILETUS, Hübner.

Verz. bekannt. Schmett. p. 71, 1816; W. p. 158; *Hypo-chrysops*, Feld. Wien Ent. Mon. iv. p. 243, 1860; Druce Trans. Ent. Soc. Lond. 1891, p. 179.

M. REX, Boisd. Voy. Astr. Lep. p. 72, 1832; W. p. 159.  
*Hab.* Darnley Is.

M. ROVENA, Druce Trans. Ent. Soc. Lond. 1891, p. 184; W. p. 160, pl. 2, f. 16. Syn. *epicletus* of Misk. Cat.  
*Hab.* Rockhampton to Cooktown.

M. APOLLO, Misk. Syn. Cat. Rhop. Aust. Suppt. 1891; W. p. 161.  
*Hab.* Herbert River, Queensland.

95. M. APELLES, Fabr. Syst. Ent. p. 524, 1775; Don. Ins. New Holl. pl. 30, f. 2, 1805; Staud. Exot. Schmett. pl. 94, 1888; W. p. 162.  
*Hab.* Rockhampton to Cape York.

M. MISKINI, Waterh. P.L.S.N.S.W. 1903, p. 164, pl. 3, f. 30, 31.  
*Hab.* Brisbane to Cairns.

- M. HALYÆTUS, Hew. Trans. Ent. Soc. 1874, p. 350; Druce l. c. 1891, p. 185, pl. 10. f. 4, 5; W. p. 163. Syn. *uranites*, Meyrick.  
*Hab.* Swan R., Geraldton, W. Australia.
- M. DELICIA, Hew. Ent. Mo. Mag. xii. p. 38, 1875; Druce Trans. Ent. Soc. Lond. 1891, p. 186, pl. 10, f. 6, 7; Vict. Butt. ii. p. 94, 1894; W. p. 166: Var. *duaringæ*, W. p. 167.  
*Hab.* Victoria, N. S. Wales, Brisbane to Rockhampton.
- M. MELEAGRIS, Waterh. P.L.S.N.S.W. 1903, p. 270.  
*Hab.* Cardwell, Queensland.
100. M. IGNITA, Leach Zool. Misc. i. p. 136, pl. 60, f. 1-3, 1814; Vict. Butt. ii. p. 97, 1894; W. p. 168, pl. 3, f. 13, 32, 33. Syn. *olliffi*, Miskin.  
*Hab.* S.W. and S. Australia, Victoria, N. S. Wales, Brisbane.
- M. EUCLIDES, Misk. P.L.S.N.S.W. 1888, p. 1517; W. p. 170.  
*Hab.* Gippsland, Victoria.
- M. CHRYSONOTUS, G. Smith and Kirby Rhop. Exot. pt. 48, f. 3, 4, 1899; W. p. 170.  
*Hab.* Rockhampton to Cooktown.
- M. EPICURUS, Misk. Trans. Ent. Soc. Lond. 1876, p. 455; G. Smith & Kirby Rhop. Exot. pt. 32, 1895; W. p. 171.  
*Hab.* Sydney, Brisbane.
- M. HECALIUS, Misk. Trans. Ent. Soc. Lond. 1884, p. 94; P.L.S.N.S.W. 1888, p. 1516; Vict. Butt. ii. p. 96, 1894; W. p. 172, pl. 3, f. 35.  
*Hab.* Victoria, Illawarra, N.S.W.
105. M. NARCISSUS, Fabr. Syst. Ent. p. 524, 1775; Don. Ins. New Holl. pl. 30, f. 3, 1805; W. p. 173, pl. 3, f. 34.  
*Hab.* Cooktown to Thursday Is.
- M. EUCLETUS, Feld. Reise Nov. Lep. ii. p. 253, 1865; Druce Trans. Ent. Soc. Lond. 1891, p. 188, pl. 10, f. 12, 13; W. p. 174.  
*Hab.* Thursday Is.
35. CANDALIDES, Hübner.
- Verz. bekannt. Schmett. p. 73, 1816; W. p. 175. *Erina*, Swainson Zool. Ill. ii. t. 134, 1832. *Holochila* (nom. præocc.) Feld. Verh. Zool. Bot. Gesell. Wien xii. 1862.
- C. XANTHOSPILOS, Hübn. Samml. Exot. Schmett. 1806-16; Vict. Butt. ii. p. 89, 1894; W. p. 177, pl. 3, f. 5. Syn. *hübneri*, Godt.; *pulchella*, Swains.; *bryos*, Boisd.  
*Hab.* Victoria, N. S. Wales, Brisbane to Rockhampton.

- C. HEATHI, Cox Entom. iv. p. 402, 1873 ; Math. Trans. Ent. Soc. Lond. 1888, p. 151 ; Vict. Butt. ii. p. 93, 1894 ; W. p. 178. Syn. *paradoxa*, Guest.  
*Hab.* S. Australia, Victoria, N. S. Wales, Brisbane.
- C. CYPROTUS, Oll. P.L.S.N.S.W. 1885, p. 716 ; W. p. 187. Syn. *purpurea*, G. Smith & Kirby.  
*Hab.* Sydney, Katoomba, Brisbane to Rockhampton.
110. C. CYANITES. Meyr. P.L.S.N.S.W. 1887, p. 828 ; W. p. 186.  
*Hab.* S.W. and S. Australia, Victoria.
- C. ACASTA, Cox Entom. iv. p. 402, 1873 ; W. p. 186. Syn. *anita*, Semp.; *mærens*, Rosen.; *canescens*, Misk.  
*Hab.* S. W. and S. Australia, Tasmania, Victoria, N. S. Wales.
- C. HYACINTHINA, Semp. Mus. Godf. Lep. xiv. p. 162, 1878 ; W. p. 185. *Hol. erinus* in Vict. Butt. ii. p. 91, 1894. Syn. *simplex*, Tepper.  
*Hab.* S.W. and S. Australia, Victoria, N. S. Wales, Brisbane to Mackay.
- C. ERINUS, Fabr. Syst. Ent. p. 525, 1775; Don. Ins. New Holl. pl. 31, f. 3, 1805 ; W. p. 183. Syn. *subpallidus*, Lucas.  
*Hab.* Brisbane to Cape York, N. Australia.
- C. ABSIMILIS, Feld. Verh. Zool. Bot. Gesell. Wien xii. p. 490, 1862 ; Reise Nov. Lep. ii, p. 261, pl. 32, f. 14-16, 1865 ; Aust. Butt. p. 23, 1889 ; Vict. Butt. ii. p. 90, 1894 ; W. p. 178.  
*Hab.* Victoria, N.S. Wales, Brisbane to Cairns.
115. C. MARGARITA, Semp. Mus. Godf. Lep. p. 161, 1878 ; Druce P.Z.S. 1902, ii. p. 119 ; W. p. 179.  
*Hab.* Cairns, Gayndah, Cape York.
- C. HELENITA, Semp. Mus. Godf. Lep. p. 162, 1878 ; Druce P.Z.S. 1902, ii. p. 119 ; W. p. 180. Syn. *androdus*, Misk.; *subargentea*, G. Smith & Kirby.  
*Hab.* Cairns to Cape York.
- C. GILBERTI, Waterh. P.L.S.N.S.W. 1903, p. 181.  
*Hab.* Port Darwin.
- C. ALBOSERICEA, Misk. Syn. Cat. Rhop. Aust. p. 65, 1891 ; W. p. 183, pl. 2, f. 24, 25.  
*Hab.* Moreton Bay.

### 36. PHILIRIS, Röber.

Tijdschr. Ent. xxxiv. p. 317 ; Exot. Schmett. p. 273, 1892 ; W. p. 188.

- P. INNOTATUS, Misk. Ent. Mo. Mag. 1874, p. 165; W. p. 189: *P. ilias*, auctorum nec Felder.  
*Hab.* Richmond R. to Cape York.
120. P. NITENS, G. Smith Nov. Zool. 1898, p. 107; Rhop. Exot. pt. 49, 1899; W. p. 190.  
*Hab.* N. Queensland.
- P. KAMERUNGÆ, Waterh. P.L.S.N.S.W. 1902, p. 650.  
*Hab.* Cairns District.
- P. KURANDÆ, Waterh. P.L.S.N.S.W. 1902, p. 651.  
*Hab.* Cairns District.
37. PSEUDODIPSAS, Felder.
- Wien Ent. Mon. iv p. 243, 1860; W. p. 190.
- P. EONE, Feld. Wien Ent. Mon. iv. p. 243, 1860; Reise Nov. Lep. ii p. 258, pl. 32, f. 8, 9, 1865; W. p. 191, pl. 2, fig. 14, 15.  
*Hab.* Cairns to Cape York.
- P. DIGGLESI, Hew. Trans. Ent. Soc. Lond. 1874, p. 344; Ill. Diurn. Lep. Lyc. p. 218, pl. 39, f. 1-4, 1878; W. p. 192.  
*Hab.* Brisbane to Cape York.
125. P. FUMIDUS, Misk. Proc. Roy. Soc. Qsl. 1889, p. 264; W. p. 193.  
*Hab.* Richmond R. to Cairns.
- P. BRISBANENSIS, Misk. Trans. Ent. Soc. Lond. 1884, p. 95; W. p. 194. Syn. *cyrilus*, And. & Spry.  
*Hab.* Victoria, Sydney, Brisbane.
38. LYCÆNESTHES, Moore.
- P.Z.S. 1865, p. 773; de Nicév. Butt. Ind. iii. p. 127, 1890; W. p. 196.
- L. EMOLUS, Godt. Enc. Meth. ix. p. 656, 1823; W. p. 197.  
 Syn. *balliston*, Hübn.; *bengalensis*, Moore.  
*Hab.* Mackay District (?)
- L. MODESTUS, Waterh. P.L.S.N.S.W. 1903, p. 198. Syn.  
*L. phaseli* of Misk. Cat.  
*Hab.* Mackay to Cape York.
- L. GODEFFROYI, Semp. Mus. Godf. Lep. xiv. p. 165, 1878; W. p. 199. Syn. *turneri*, Misk.  
*Hab.* Mackay to Cape York, Port Darwin.
39. POLYOMMATUS, Latreille.
- Gen. Crust. et Ins. iv. p. 206, 1809; de Nicév. Butt. Ind. iii. p. 203, 1890; W. p. 200.

130. P. BOETICUS, Linn. Syst. Nat. ed. xii i. p. 789, 1767; Vict. Butt ii. p. 84, 1894.

A wide-spread species with many synonyms.

*Hab.* Throughout Australia

40. CATOCHRYSOOPS, Boisduval.

- Voy. Astr. Lep. p. 87, 1832; W. p. 201. Syn. *Euchrysops*, Butler.

- C. PLATISSA, Herr-Schff. Stett. Ent. Zeit. 1869, p. 74, pl. 4, f. 20; W. p. 201. Syn. *lithargyria*, Moore; *strabo* of Misk. Cat.

*Hab.* Brisbane to Cape York, N.W. and N. Australia.

- C. CNEJUS, Fabr. Ent. Syst. Suppt. p. 430, 1798; Dist. Rhop Malay. p. 225, pl. 21, f. 2, pl. 44, f. 15, 1884-6; W. p. 202.

*Hab.* Richmond R. to Cape York.

41. TARUCUS, Moore.

- Lep. Cey. i. p. 81, 1881; de Nicév, Butt. Ind. iii. p. 186, 1890; W. p. 207.

- T. TELICANUS, Lang Verz. sein. Schmett. ii. p. 47, 387-9, 1789; W. p. 207. Syn. *plinius*, Fabr.; *pseudocassius*, Murray; *pulchra*, Murray.

*Hab.* Sydney to Bowen.

42. CHILADES, Moore.

- Lep. Cey. i. p. 76, 1881; W. p. 209.

- C. TROCHILUS, Frey. Neu. Beit. Schmett. v. p. 98, pl. 440, f. 1, 1844; W. p. 210. Syn. *putli*, Koll.; *isophthalma*, Herr-Schiff.; *parva*, Murray; *gnoma*, Snellen.

*Hab.* Rockhampton to Cairns.

43. ZIZERA, Moore.

- Lep. Cey. i. p. 78, 1881; W. p. 210.

135. Z. DEOSPILA, Waterh. P.L.S.N.S.W. 1903, p. 211, pl. 2, f. 5.

*Hab.* N.W. Australia.

- Z. LYSIMON, Hübn. Eur. Schmett. i. pl. 105, f. 534, 535, 1798-1803; W. p. 212. Syn. *novæ-hollandiæ*, Feld.; *knysna*, Trimen.

*Hab.* Richmond R. to Cape York, Port Darwin.

- Z. ALSULUS, Herr-Schff. Stett. Ent. Zeit. 1869, p. 75; W. p. 212. Syn. *lulu*, Mathew; *exilis*, Lucas; *exiloides*, Lucas; *gracilis*, Miskin.

*Hab.* Brisbane to Cape York, Port Darwin.

Z. LABRADUS, Godt. Enc. Meth. ix. p. 680, 1823 ; Vict. Butt. ii. p. 87, 1894 ; W. p. 214. Syn. *communis*, Herr-Schiff. ; *phœbe*, Murray ; *delicata*, Tepper ; *pervulgatus*, Guest.

*Hab.* Throughout Australia.

Z. GAIKA, Trimen Trans. Ent. Soc. Lond. 1862, p. 403 ; W. p. 215. Syn. *pygmæa*, Snellen ; *attenuata*, Lucas ; *conformis*, Butler.

*Hab.* Brisbane to Cape York.

#### 44. JAMIDES, Hübner.

Verz. bekannt. Schmett. p. 71, 1816 ; Moore Lep. Cey. i. p. 86, 1881 ; W. p. 216.

140. J. PHASELLI, Math. Trans. Ent. Soc. Lond. 1889, p. 311 ; W. p. 217. Syn. *oranigra*, Lucas ; *bochus* of Misk. Cat. ; not *Lycaenesthes phaseli* of Misk. Cat.

*Hab.* Brisbane to Cape York.

J. AMARAUGE, Druce P.Z.S. 1891, p. 366, pl. 31, f. 20, 21. W. p. 216.

*Hab.* Darnley Island.

#### 45. EVERES, Hübner.

Verz. bekannt. Schmett. p. 69, 1816 ; Moore Lep. Cey. i. p. 85, 1881 ; W. p. 218.

E. ARGIADES, Pall. Reise i. App. p. 472, 1771 ; de Nicév. Butt. Ind. iii. p. 137, pl. 26, f. 180, 1890 ; W. p. 219.

This almost world-wide species has many synonyms, for which see Syn. Cat. Rhop. Aust. p. 56, 1891.

*Hab.* Richmond R. to Cairns.

#### 46. NACADUBA, Moore.

Lep. Cey. i. p. 88, 1881 ; de Nicév. Butt. Ind. iii. p. 141, 1890 ; W. p. 220.

N. ANCYRA, Feld. Sitzb. Akad. Wiss. Wien. Math. Nat. Cl. xl. p. 457, 1860 ; Reise Nov. Lep. ii. p. 276, pl. 34, f. 5, 1865 ; W. p. 225. Syn. *florinda*, Butl.

*Hab.* Richmond R. to Cape York, N.W. Australia.

N. LINEATA, Murray, Trans. Ent. Soc. Lond. 1874, p. 524, pl. 10, f. 9 ; Misk. P.L.S.N.S.W. 1890, p. 35 ; W. p. 227.

*Hab.* Sydney to Cape York.

145. N. PALMYRA, Feld. Sitzb. Akad. Wiss. Wien Math. Nat. Cl. xl. p. 458, 1860 ; W. p. 228. Syn. *tasmanicus*, Misk. ; *elaborata*, Lucas.

*Hab.* Brisbane to Cairns.

- N. DION, Godt. Enc. Meth. ix. p. 679, 1823; W. p. 222.  
*N. perusia* auctorum nec Feld.  
*Hab.* Richmond R. to Cape York.
- N. BERENICE, Herr-Schff. Stett. Ent. Zeit. 1869, p. 74; W. p. 223. Syn. *pavana* of Misk. Cat.  
*Hab.* Richmond R. to Cairns.
- N. DUBIOSA, Semp. Mus. Godf. Lep. xiv. p. 159, 1878; W. p. 229. Syn. *conjugens*, Lucas; *lulu* of Misk. Cat.  
*Hab.* Richmond R. to Cooktown.
- N. MACKAYENSIS, Misk. P.L.S.N.S.W. 1890, p. 35; W. p. 231.  
*Hab.* Mackay.
150. N. FELDERI, Murray, Trans. Ent. Soc. Lond. 1874, p. 527, pl. 10, f. 4, 6; W. p. 225. *nora*, auctorum nec Felder.  
*Hab.* Sydney to Cape York.
- N. BIOCELLATA, Feld. Reise Nov. Lep. ii. p. 280, pl. 35, f. 14, 1865; W. p. 231. Syn. *adamatapuncta*, Tepper; *armillata*, Butler.  
*Hab.* Throughout Australia.
47. THECLINESTHES, Röber.
- Tijdschr. voor Ent. xxxiv. p. 316, 1892; *Utica*, Hew. Ill. Diurn. Lep. p. 56, 1865; W. p. 239. *Utica* being preoccupied in *Crustacea* (1847), I have used Röber's genus, because *T. eremicola*, Pagenst, which Druce states to be synonymous with the type of *Utica*, Hew., was placed in that genus in 1900. I have been unable to consult the description of *Theclinesthes* and the Zoological Record for 1892 does not mention the type.
- T. ONYCHA, Hew. Ill. Diurn. Lep. p. 56, pl. 24, f. 11, 12, 1865; W. p. 240. Syn. *miskini*, Lucas; *eremicola*, Pagenst.  
*Var.* ATROSUFFUSA, Waterh. P.L.S.N.S.W. 1903, p. 241.  
*Var.* ALBOCINCTA, Waterh. l.c. 1903, p. 242.  
*Hab.* Cape York to Sydney, W. Australia.
- T. SCINTILLATA, Lucas. Proc. Roy. Soc. Q'ld. 1889, p. 157, pl. ix., f. 8-10; W. p. 242  
*Hab.* Richmond R. to Cairns
48. UNA, de Nicéville.
- Butt. Ind. iii. p. 51, 1890; W. p. 233.
- U. AGRICOLA, Westw. Gen. Diurn. Lep. ii., p. 496, pl. 76, f. 4, 1852; Vict. Butt. ii. p. 88, 1894; W. p. 234.  
*Hab.* S. Australia, Victoria, Tasmania, N.S. Wales, Brisbane.

155. U. HOBARTENSIS, Misk. P.L.S.N.S.W. 1890, p. 38; W. p. 235.  
*Hab.* Victoria, N.S. Wales, Tasmania.
- U. MATHEWI, Misk. P.L.S.N.S.W. 1890, p. 38; W. p. 236.  
 This is probably *L. sylvicola*, Leach MS.  
*Hab.* Sydney.
- U. SULPITIUS, Misk. P.L.S.N.S.W. 1890, p. 37; W. p. 237.  
*Hab.* Brisbane to Cooktown.
- U. SERPENTATA, Herr-Schiff Stett. Ent. Zeit. 1869, p. 74;  
 Vict. Butt. ii. p. 88, 1894; W. p. 238. Syn. *fasciola*,  
 Tepper; *molybdæna*, Guest.  
*Hab.* Throughout Australia.

#### 49. LUCIA, Swainson.

Zool. Ill. Ins. ii. p. 135, 1833; W. p. 203: *Chrysophanus*,  
 in Miskin's Catalogue.

- L. LUCANUS, Fabr. Ent. Syst. iii. p. 322, 1793; Vict. Butt.  
 ii. p. 81, 1894; W. p. 204. Syn. *limbaria*, Swains.;  
*discifer*, Herr-Schiff.  
*Hab.* S. Australia, Victoria, N.S. Wales, Brisbane to  
 Mackay.
160. L. AURIFER, Blanch. Voy. Pôle Sud. t. 3, f. 13, 14, 1853;  
 Vict. Butt. ii. p. 82, 1894; W. p. 205. Syn. *limbaria*,  
 Blanch  
*Hab.* S. Australia, Tasmania, Victoria, N.S. Wales to  
 Newcastle.
- L. PYRODISCUS, Rosen. Ann. Mag. Nat. Hist. 1885, p. 377;  
 W. p. 206. Syn. *aenea*, Misk.  
*Hab.* Victoria, N.S. Wales, Brisbane to Bowen.

#### 50. OGYRIS, Westwood.

- Gen. Diurn. Lep. ii. p. 472, 1852; Misk. P.L.S.N.S.W. 1890,  
 p. 23; W. p. 243.
- O. OLANE, Hew. Cat. Lyc. Brit. Mus. p. 2, pl. 1, f. 10, 11,  
 1862; Vict. Butt. ii. p. 105, 1894.  
*Hab.* S. Australia, Victoria, N.S. Wales.
- O. BARNARDI, Misk. P.L.S.N.S.W. 1890, p. 27.  
*Hab.* Dawson R., Queensland.
- O. ABROTA, Westw. Gen. Diurn. Lep. pl. 75, f. 8, 1852;  
 Hew. Ex. Butt. i. Og. pl. 1, f. 1, 2, 1853; Vict. Butt. ii.  
 p. 109, 1894. Syn. *damo*, Doubl.; *catharina*, Feld.  
*Hab.* Victoria, N.S. Wales, S. Queensland.

165. O. IANTHIS, Waterh. P.L.S.N.S.W. 1900, p. 52, pl. 1, f. 1-4; l.c. 1902, p. 341.  
*Hab.* Sydney, Chillagoe, Queensland
- O. OROETES, Hew. Cat. Lyc. Brit. Mus. p. 3, pl. 1, f. 12, 13, 1862; Waterh. P.L.S.N.S.W. 1902, p. 335, pl. 14, f. 1, 2.  
*Hab.* Brisbane to Townsville.
- O. HEWITSONI, Waterh. P.L.S.N.S.W. 1902, p. 338, pl. 14, f. 5-8; Vict. Butt. ii. p. 103, 1894, as *O. amaryllis*.  
*Hab.* Throughout Australia except extreme North.
- O. AMARYLLIS, Hew. Cat. Lyc. Brit. Mus. p. 3, pl. 1, f. 5, 6, 1862; Waterh. P.L.S.N.S.W. 1902, p. 336, pl. 14, f. 3-4.  
*Hab.* Richmond R. to Moreton Bay.
- O. ÆNONE, Waterh. P.L.S.N.S.W. 1902, p. 339, pl. 14, f. 9; 1903, p. 246.  
*Hab.* Cooktown.
170. O. GENOVEVA, Hew. Ex. Butt. i. Og. pl. 1, f. 5, 6, 1853; Misk. Trans. Ent. Soc. Lond., 1883, p. 343, pl. 15; Staud. Exot. Schmett. pl. 96, 1888. Syn *zosine*, Hew.  
*Hab.* Sydney to Cooktown.
- O. OTANES, Feld. Reise Nov. Lep. ii. p. 217, pl. 28, f. 1-3, 1865. Syn *halmaturia* (part), Tepper Nat. Ins. S.A. ii., p. 12, 1890.  
*Hab.* South Australia.
- O. IDMO, Hew. Cat. Lyc. Brit. Mus. p. 2, pl. 1, f. 3, 4. 1862; Vict. Butt. ii. p. 104, 1894. Syn. *orontas*, Hew.; *halmaturia* (part), Tepper.  
*Hab.* West and South Australia, Victoria.
51. ARHOPALA, Boisduval.
- Voy. Astr. Lep. p. 75, 1832; de Nicév. Butt. Ind. iii. p. 226, 1890; *Amblypodia*, auctorum.
- A. MEANDER, Boisd. Voy. Astr. Lep. p. 76, 1832; Hew. Cat. Lyc. Brit. Mus. pl. 2, f. 4-6. 1862; W. p. 251.  
*Hab.* Rockhampton to Cape York.
- A. AMYTIS, Hew. Cat. Lyc. Brit. Mus. p. 4, pl. 2, f. 7-9, 1862; W. p. 251. Syn *cyronthe*, Misk  
*Hab.* Mackay to Cape York, Port Darwin.
175. A. EUPOLIS, Misk. P.L.S.N.S.W. 1890, p. 42; W. p. 252.  
*Hab.* Mackay to Cape York, Port Darwin
- A. WILDEI, Misk. Syn. Cat. Rhop. Aust. p. 71, 1891; W. p. 253, pl. 2, f. 6, 7.  
*Hab.* Cairns.

## 52. IALMENUS, Hübner.

Verz. bekannt. Schmett. p. 75, 1816; Hew. Ill. Diurn. Lep. p. 53, 1865; W. p. 254.

I. EUBULUS, Misk. Trans. Ent. Soc. Lond. 1876, p. 457; W. p. 256.

*Hab.* Rockhampton.

I. EVAGORAS, Don. Ins. New Holl. pl. 30, f. 1, 1805; Staud. Exot. Schmett. pl. 95, 1888; Aust. Butt. p. 24, 1889; Vict. Butt. ii. p. 97, 1894. Syn. *coelestis*, Drap.

*Hab.* S. Australia, Victoria, N.S. Wales, Brisbane.

I. EICHHORNI, Staud. Exot. Schmett. p. 275, 1888. Syn. *itanus*, Misk.

*Hab.* Cape York, Cooktown.

180. I. ICTINUS, Hew. Ill. Diurn. Lep. p. 54, pl. 24, f. 6-8, 1865; Vict. Butt. ii. p. 98, 1894. Syn. *schræderi*, Feld.

*Hab.* Victoria, N.S. Wales, Brisbane to Cardwell.

I. DÆMELI, Semp. Mus. Godf. Lep. xiv. p. 166, 1878, Druce P.Z.S. 1902, ii. p. 120, pl. 11, f. 10, 11. Syn. *illidgei*, Misk.

*Hab.* Brisbane to Rockhampton.

I. LITHOCHROA, Waterh. P.L.S.N.S.W. 1903, p. 258.

*Hab.* South Australia.

I. INOUS, Hew. Ill. Diurn. Lep. p. 54, pl. 24, f. 1, 2, 1865; Vict. Butt. ii. p. 99, 1894. Syn. *icilius*, Hew.; *aeneus*, Tepper.

*Hab.* Victoria, S. Australia, W. Australia.

I. CLEMENTI, Druce P.Z.S. 1902, ii. p. 120, pl. 11, f. 9.

*Hab.* West. Australia.

## 53. PSEUDALMENUS, Druce.

P.Z.S. 1902 ii., p. 116; W. p. 260.

185. P. MYRSILUS, Doubl. & Hew. Gen. Diurn. Lep. ii. p. 487, pl. 75, f. 3, 1852; Vict. Butt. ii. p. 100, 1894. Syn. *chlorinda*, Blanch.

*Hab.* Tasmania, Victoria, N.S. Wales.

## 54. PSEUDONOTIS, Druce.

Ann. Mag. Nat. Hist. 1894, p. 252; W. p. 261.

P. TURNERI, Waterh. P.L.S.N.S.W. 1902, p. 648; W. p. 261, pl. 2, f. 28

This species is only placed in this genus provisionally.

*Hab.* Cairns District.

## 55. HYPOLYCÆNA, Felder.

Wien Ent. Mon. vi. p. 293, 1862; de Nicév. Butt. Ind. iii. p. 389, 1890.

H. PHORBAS, Fabr. Syst. Ent. iii. p. 277, 1793; Hew. Ill. Diurn. Lep. pl. 21, f. 5, 7, 8, 1865; W. p. 262. *Syn dictæa*, Feld.

*Hab.* Mackay to Cape York, Port Darwin.

H. NOCTULA, Staud. Exot. Schmett. p. 283, pl. 96, 1888; W. p. 263.

*Hab.* Cooktown.

## 56. DEUDORIX, Hewitson.

Ill. Diurn. Lep. p. 16, 1863; de Nicév. Butt. Ind. iii. p. 448, 1890.

D. DIOVIS, Hew. Ill. Diurn. Lep. p. 30, pl. 7, f. 10-12, 1863; W. p. 264.

*Hab.* Richmond R. to Cairns.

190. D. EPIRUS, Feld. Sitzb Akad. Wiss. Wien Math. Nat. Cl. xl. p. 452, 1860; W. p. 265. *Syn. despæna*, Hew.

*Hab.* Cape York.

## 57. RAPALA, Moore.

Lep. Cey. i. p. 105, 1881; W. p. 266.

D. SIMSONI, Misk. Ent. Mo. Mag. xi. p. 165, 1874; W. p. 266.

*Hab.* Brisbane to Cape York.

D. DEMOCLES, Misk. Trans. Ent. Soc. Lond. 1884, p. 95; W. p. 267.

*Hab.* Johnston R., Queensland.

## 58. BINDAHARA, Moore.

Lep. Cey. i. p. 111, 1881; de Nicév. Butt. Ind. iii. p. 471, 1890; W. p. 267.

B. SUGRIVA, Horsf. Cat. Lep. E.I.C. p. 105, pl. 1, f. 10, 10 a, 1829; Misk. Syn. Cat. Rhop. Aust. p. 69, 1891.

*Hab.* Townsville to Cape York.

## 59. LIPHYRA, Westwood.

Trans. Ent. Soc. Lond. 1864, p. 31; de Nicév. Butt. Ind. iii. p. 489, 1890; *Sterosis*, Feld. Reise Nov. Lep. ii. p. 219. 1865

L. BRASSOLIS, Westw. Trans. Ent. Soc. Lond. 1864, p. 31; Dist. Rhop. Malay, p. 204, pl. 22, f. 18, 1884; Staud. Exot. Schmett. p. 269, pl. 94, 1888; Misk. Proc. Roy. Soc. Q'ld. 1889, p. 264; *S. robusta*, Feld. Reise Nov. Lep. ii, p. 219, pl. 27, f. 10, 11, 1865.

*Hab.* Townsville to Thursday Island.

## Family PIERIDÆ

*Ovum*—“Very tall and slender, tapering toward a much smaller rounded summit, provided with a variable number of distinct longitudinal ribs, and crossed by frequent transverse finer raised lines.”—(Scudder.)

*Larva*—Usually smooth, cylindrical, often gregarious.

*Papa*—Angulated, more or less pointed at either end ; attached by the tail and a central girdle.

*Imago*—Of moderate size ; six perfect legs in both sexes, without spurs, claws bifid.

This family contains “the whites” and “the yellows.” Many of the species are delicate insects. By following some modern authors, several of the species enumerated below would be considered as mere varieties, but in the present state of our knowledge I prefer to leave them as they are at present determined, until the full seasonal changes, which I believe to be very great, are thoroughly worked out.

### 60. TERIAS, Swainson.

Zool. Ill. i. pl. 22, 1820-21; Butler, P.Z.S. 1871, p. 526; Misk. Proc. Roy. Soc. Q'ld. 1889, p. 256; Butler, Ann. Mag. Nat. Hist. 1898, p. 56-82.

I am totally opposed to splitting up the variously-marked forms and considering them as distinct species. Out of over fifty specimens of *T. hecate* caught on one day, I was not able to pick out two that were marked identically. I am only able to recognise from amongst my long series six distinct forms. The following arrangement of the species with their synonyms must only be considered provisional, as seasonal forms occur.

195. *T. VIRGO*, Wallace, Trans. Ent. Soc. Lond. 1867, p. 328.

Butler considers our form distinct, and has called it *T. papuana*.

*Hab.* Cape York.

*T. HECABE*, Linn. Syst. Nat. x. p. 470, 1758.

Butler considers our form distinct, calling it *T. sulphurata*. Butler, with eleven other species all described by himself as synonyms. He says: “Ranges from Northern Australia northwards to Timor, Aru and New Guinea, thence eastward to New Ireland, appearing just to touch the Solomons ; more to the south it ranges to the Loyalty, New Hebrides and Fiji Islands.

*Hab.* Cape York to Sydney.

*T. HERLA*, MacL., King's Surv. Aust. ii. App. p. 460, 1827.

The type in the Macleay Museum has a beautiful pink suffusion on the underside of the hindwings : this is the rarest form.

*Hab.* Brisbane to Cape York, Sydney ?

T. LIBYTHEA, Fabr. Ent. Syst. Suppt. p. 427, 1798; *T. zoraide*, Feld. Reise Nov. Lep. ii, p. 212, 1865; *T. sinta*, Wallace Trans. Ent. Soc. Lond. 1867, p. 322; *T. australis*, Wallace l. c. 1867, p. 321; *T. immaculata*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 258.

*Hab.* Cape York to Sydney.

T. SMILAX, Don. Ins. New Holl. pl. 20. f. 3, 1805; Aust. Butt. p. 26, 1889; Vict. Butt. i. p. 27, 1893; *T. ingana*, Wallace Trans. Ent. Soc. Lond. 1867, p. 322; *T. parvula*, Herr-Schff. Stett. Ent. Zeit. 1869, p. 78; *T. varius*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 259; *T. casta*, Lucas Proc. Roy. Soc. Q'ld. 1891, p. 1.

The smallest of our species and very variable.

*Hab.* S. Australia, Eastern Australia.

200. T. LINEATA, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 257.

This may be identical with *T. sana*, Butler, P.Z.S. 1877, p. 470, a species I am unable to recognise.

*Hab.* N. Queensland.

#### 61. ELODINA, Felder.

Reise Novara Lep. p. 215, 1865; Wallace Trans. Ent. Soc. Lond. 1867, p. 318; Schatz. Exot. Schmett. ii. p. 65, 1886.

Some species of this genus of delicate white butterflies are very common, and others apparently very rare. At present the number of species is provisional, as I am sure seasonal forms occur.

E. EGNATIA, Godt. Enc. Meth. ix, p. 138, 1819; *Pieris padusa*, Hew. Exot. Butt. i, pl. 2, f. 10, 11, 1853.

*Hab.* N. Queensland.

E. ANGULIPENNIS, Lucas Rev. Zool. p. 431, 1852; Math. Trans. Ent. Soc. Lond. 1888, p. 154; Vict. Butt. i. p. 26, 1893; *Pieris pallene*, Hew. Exot. Butt. i, pl. 2, f. 8, 9, 1853.

*Hab.* Queensland, N.S. Wales, Victoria.

E. QUADRATA, Butler Cist. Ent. i., p. 175, 1873.

*Hab.* Sydney, New England District.

E. PERDITA, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 263.

*E. walkeri*, Butl., and *E. baudiniana*, Butl. Ann. Mag. Nat. Hist. 1898, p. 294, from the neighbourhood of Port Darwin, appear to be varieties of Miskin's species.

*Hab.* Bowen, Townsville, Cooktown, Port Darwin.

205. E. PARTHIA, Hew. Exot. Butt. 1, pl. 2, f. 12, 13, 1853.

*Hab.* Cairns to Sydney.

## 62. BELENOIS, Hübner.

Verz. bekannt. Schmett. p. 92, 1816; Schatz. Exot. Schmett. ii., p. 61, 1886.

B. JAVA, Sparrman Amoen. Acad. vii, p. 504, note 1, 1767; Linn. Syst. Nat. xii., App. p. 225, 1768; *Pieris teutonia*, Fabr. Syst. Ent. p. 474, 1775; Vict. Butt. i. p. 28, 1893.

This common species appears under a great number of names in older works.

*Hab.* All Australian States.

## 63. HUPHINA, Moore.

Lep. Cey. i, p. 136, 1881.

H. PERIMALE, Don. Ins. New Holl. pl. 20, f. 1, 1805; *Pieris scyllara*, Macl., King's Surv. Aust. ii., App. p. 459, 1827.

This species has been described under many different names.

*Hab.* Cape York to Clarence R., Port Darwin.

## 64. APPIAS, Hübner.

Verz. bekannt. Schmett. p. 91, 1816; Butler Cist. Ent. i. p. 37, 49, 1870; *Tachyris*, Wallace Trans. Ent. Soc. Lond. 1867, p. 361.

A. EGA, Boisd. Sp. Gen. p. 536, 1836; Vict. Butt. i. p. 31, 1893; *Pieris melania*, Boisd. (*nec* Fabr.) Sp. Gen. p. 537, 1836 (female).

*Hab.* Cape York to Sydney, Victoria.

A. ASTERIA, Misk. P.L.S.N.S.W. 1888, p. 1514; Syn. Cat. Rhop. Aust. p. 14, 1891.

*Hab.* Cairns District.

210. A. MELANIA, Fabr. Syst. Ent. p. 475, 1775; Butler, Brenchley's Cruise Curaçoa, p. 471, pl. 49, f. 4, 5, 1873; Misk. Trans. Ent. Soc. Lond. 1884, p. 91; *Pieris clementina*, Felder Reise Nov. Lep. p. 162, pl. 25, f. 6, 1865.

The figure in Ins. New Holland appears to be quite a different species.

*Hab.* Cape York.

A. ADA, Cram. Pap. Exot. iv. pl. 363, c, d, 1782.

*Hab.* Cairns.

## 65. DELIAS, Hübner.

Verz. bekannt. Schmett. p. 92, 1816; Schatz Exot. Schmett. ii. p. 63, 1886; *Thyca*, Wallengren Svensk. Akad. Forh. Stockh. 1858, p. 76.

D. AGANIPPE, Don. Ins. New Holl. pl. 29, 1805; Vict. Butt. i. p. 33, 1893.

*Hab.* S. Australia, Victoria, N.S. Wales, Brisbane.

D. HARPALYCE, Don. Ins. New Holl. pl. 18, f. 1, 1805 ; Vict. Butt. i. p. 35, 1893.

*Hab.* S. Australia, Victoria, N.S. Wales.

D. NIGRINA, Fabr. Syst. Ent. p. 475, 1775 ; Don. Ins. New Holl. pl. 19, f. 1, 1805 ; Aust. Butt. p. 27, 1889.

*Hab.* Sydney to Cairns.

215. D. ARGENTHONA, Fabr. Ent. Syst. iii. p. 200, 1793 ; Aust. Butt. p. 29, 1889 ; *Thyca fragalactea*, Butler Ann. Mag. Nat. Hist. 1869, p. 243.

Miskin gives *P. plexaris*, Don., as a synonym; Kirby gives that name as a synonym of *Delias Cæneus*, Linn., saying it is common in Australia, Papua, &c; but no species agreeing with either Donovan's or Kirby's figures has been found in Australia.

*Hab.* Sydney to Cairns.

D. MYSIS, Fabr. Syst. Ent. p. 475, 1775 ; Don. Ins. New Holl. pl. 21, f. 1, 1805.

*Hab.* Mackay to Cairns.

D. NYSA, Fabr. Syst. Ent. p. 473, 1775 ; *Papilio endora*, Don. Ins. New Holl. pl. 20, f. 2, 1805.

*Hab.* Sydney to Cairns.

D. NIGIDIUS, Misk. Trans. Ent. Soc. Lond. 1884, p. 93 ; P.L.S.N.S.W. 1888, p. 1515.

*Hab.* Cardwell, Cairns.

D. INFERNA, Butler Lep. Exot. p. 63, pl. 24, f. 6, 1871.

*Hab.* Cape York.

#### 66. CATOPSILIA, Hübner.

Verz. bekannt. Schmett. p. 98, 1816. *Callidyras* auctorum.

Mr. R. E. Turner, whose opinion I value highly, considers that *C. lactea* is a variety of *C. pyranthe*, and *C. crocale* and *C. hinda* varieties of *C. pomona*; but as they are distinguishable, I am keeping them separate.

220. C. PYRANTHE, Linn. Syst. Nat. x. p. 469, 1758 ; Moore Lep. Cey. p. 124, pl. 47, f. 2, 2a, 1881.

*Pontia crokera*, MacL., King's Surv. Aust. ii. App. p. 458, 1827, is probably this species.

*Hab.* Cape York to Sydney, Victoria.

C. LACTEA, Butler Ann. Mag. Nat. Hist. 1870, p. 361 ; Lep. Exot. p. 43, pl. 16, f. 5-7, 1870.

*Hab.* Mackay to Sydney.

C. HINDA, Butler Lep. Exot. p. 31, pl. 12, f. 9, 10, 1870.

*Hab.* Rockhampton to Brisbane.

- C. CROCALE, Cram. Pap. Exot. i. pl. 55, f. c, d, 1779; Butler Lep. Exot. i. p. 22, pl. 9, f. 1-3, 6, 1870.  
*Hab.* Cape York to Richmond R., Port Darwin.
- C. POMONA, Fabr. Syst. Ent. p. 479, 1775; Don. Ins. New Holl. pl. 17, f. 3, 1805; *Papilio catilla*, Cram. Pap. Exot. iii. pl. 229, f. d, e, 1782; Aust. Butt. p. 30, 1889.  
*Hab.* Cape York to Sydney.
225. C. GORGOPHONE, Boisd. Sp. Gen. i. p. 632, 1836; Butler Lep. Exot. i. p. 30, pl. 12, f. 1-4, 1870.  
*Hab.* Cape York to Sydney.
- C. SCYLLA, Linn. Mus. Ulr. p. 242, 1764; Butler Lep. Exot. i. p. 31, pl. 12, f. 5-8, 1870.  
*Hab.* Thursday Is., Cardwell.

### Family PAPILIONIDÆ

*Ovum*—Dome-shaped, flattened at the base.

*Larva*—Cylindrical, with a forked retractile tentacle (which emits a strong odour) just behind the head.

*Pupa*—Attached by the tail and a girdle round the middle, secured in an upright position; often with a long projection at the head.

*Imago*—Usually of large size; wings strong and often with a single tail, lobate or straight. Six perfect legs in both sexes, the tibiæ furnished with a leaf-like projection; the claws usually simple.

I have refrained from using the name *Equitidæ* for this family, as it seems undesirable to change the well-known generic name of *Papilio*, though by following Dr. Scudder, the type of that genus, according to the law of priority, would be *Vanessa antiopa*.

#### 67. TROIDES, Hübner.

Verz. bekannt. Schmett., p. 88, 1816.

It is more usual to consider our "Birds-wing" species as belonging to this genus rather than *Ornithoptera*.

T. PRIAMUS POSEIDON, Doubleday Ann. Mag. Nat. Hist. 1847, p. 173.  
*Hab.* Darnley Is.

T. PRIAMUS PRONOMUS, Gray Cat. Lep. Ins. Brit. Mus. p. 2, pl. 1, f. 1, 2, 1852.  
*Hab.* Cape York, Thursday Is.

T. PRIAMUS EUPHORION, Gray Cat. Lep. Ins. Brit. Mus. p. 4, pl. 2, f. 3, 1852; *O. cassandra*, Scott Trans. Ent. Soc. N.S.W. 1864, p. 131, pl. 10.

*Hab.* Mackay to Cooktown.

230. T. PRIAMUS RICHMONDIA, Gray Cat. Lep. Ins. Brit. Mus. p. 2, pl. 2, f. 1, 2, 1852.

*Hab.* Clarence R. to Maryborough.

#### 68. PAPILIO, Auctorum.

I have adopted a trinomial system for the species herein comprised, rather than place them in sub-genera, for I regard most of the Australian forms as geographical varieties, and not true species.

P. DEMOLEUS STHENELUS, Macl., King's Surv. Aust. ii. App. p. 457, 1827; Vict. Butt. i. p. 20, 1893.

Also an inland species.

*Hab.* S. Australia, Victoria, N.S. Wales, Queensland.

P. AGAMEMNON LIGATUS, Roths. Nov. Zool. 1895, p. 451.

*Hab.* Cape York to Mackay.

P. MACFARLANEI, Butler P.Z.S. 1877, p. 471; *P. aegistus*, Auctorum *nec* Linn.

For a critical account of this and the other Australian species and sub-species, see Rothschild's paper in Nov. Zool. 1895.

*Hab.* Cape York, Thursday Is.

P. EURYPYLLUS LYCAON, Westw. Arc. Ent. ii, p. 15, 1843.

*Hab.* Cape York to Sydney, Thursday Is., Port Darwin.

235. P. SARPEDON CHOREDON, Feld. Verh. Zool. Bot. Gesell. p. 306, 350, 1864; Aust. Butt. p. 34, 1889.

*Hab.* Cape York to Sydney, Thursday Is.

P. ANACTUS, Macl., King's Surv. Aust. ii. App. p. 458, 1827; Vict. Butt. i. p. 18, 1893.

*Hab.* Victoria, N.S. Wales, Brisbane to Mackay.

P. AMBRAX EGIPHIUS, Misk. Trans. Ent. Soc. Lond. 1876, p. 451.

*Hab.* Cardwell, Cairns.

P. ÆGEUS, Don. Ins. New Holl. pl. 14, 1805; *P. erechtheus*, Don. Ins. New Holl. pl. 15, 1805; Aust. Butt. p. 32, 33, 1893; Vict. Butt. i. p. 14-17, 1893.

*Hab.* Victoria, N.S. Wales, Brisbane to Cape York.

P. ÆGEUS ORMENUS, Guér. Voy. Coq. pl. 14, f. 3, 1829.

*Hab.* Cape York, Darnley Is.

240. *P. FUSCUS CAPANEUS*, Westw. Arc. Ent. ii. p. 15, pl. 52, f. 1, 2, 1843-5.  
*Hab.* Cape York to Richmond R., Thursday Is., Port Darwin.
- P. CANOPUS*, Westw. Ann. Mag. Nat. Hist. 1842, p. 38; Arc. Ent. ii. p 81, pl. 68, 1843-5 (typical form).  
*Hab.* Port Darwin, N.W. Australia.
- P. ULYSSES JOESA*, Butler Entom. vi. p. 348, 1869; Exot. Lep. i. pl. 8, f. 1, 2, 1870: Aust. Butt. p. 36, 1889.  
*Hab.* Cape York to Mackay, Thursday Is.
- P. MACLEAYANUS*, Leach Zool. Misc. i. pl. 5, 1814; Aust. Butt. p. 35, 1889; Vict. Butt. i. p. 22, 1893.  
*Hab.* Tasmania, Victoria, N.S. Wales, Brisbane to Cairns.
- P. LEOSTHENES*, Doubleday Ann. Mag. Nat. Hist. 1846, p. 372; Gray Cat. Lep. Ins. Brit. Mus. i. p. 30, pl. 3, f. 1, 1852.  
*Hab.* Mackay to Sydney.
245. *P. ARISTEUS PARMATUS*, Gray Cat. Lep. Ins. Brit. Mus. i, p. 30, pl. 3, f. 2, 1852.  
*Hab.* Cape York to Mackay.

#### 69. *MENELAIDES*, Hübner.

Verz. bekannt. Schmett. p. 84, 1816.

*M. POLYDORUS QUEENSLANDICUS*, Roths. Nov. Zool. 1895, p. 240.

*M. godartianus*, Lucas, is another subspecies, not Australian.

*Hab.* Thursday Is. Cape York to Cardwell.

*M. LIRIS*, Godt. Enc. Meth. p. 73, 1819; Roths. Nov. Zool. 1895, p. 235.

Doubtfully Australian.

*Hab.* N.W. Australia.

#### 70. *EURYCUS*, Boisduval.

Sp. Gen. i. p. 391, 1836.

*E. CRESSIDA*, Fabr. Syst. Ent. p. 448, 1775; Don. Ins. New. Holl. pl. 12, f. 2, 1805; Aust. Butt. p. 31, 1889; *Papilio harmonia*, Fabr. Ent. Syst. iii. p. 20, 1797; Don. Ins. New Holl. pl. 12, f. 1, 1805.

*Hab.* Cape York to Sydney, Thursday Is.

## Family HESPERIDÆ.

*Ovum*—Large, opaque, dome-shaped, smooth, or vertically and transversely ribbed.

*Larva*—Long, cylindrical, naked; head large and very hard, thorax narrowed in front, so as to form a long neck.

*Pupa*—Attached by the tail, and concealed in a loose cocoon formed by drawing several leaves together, or by wrapping up a single leaf.

*Imago*—Six perfect legs in both sexes, often spined. Wings with the discoidal cell of hindwing slenderly and often incompletely closed, subcostal nervure of forewing always with four branches, all four emitted beyond the end of cell. Insects of small or moderate size, and rapid flight. Body of most very robust; head large; eyes prominent; antennæ wide apart at base, with a thick club or strong curved hook at tip; palpi short, very broad, closely pressed against the face, densely squamose; forewings triangular, often with a transverse row of three sub-apical spots; in male often an oblique bar of raised scales, sometimes a costal fold.

*Range*—The *Hesperiidae* are found throughout Australia and Tasmania, but are absent from New Zealand. The genera *Hesperilla* and *Trapezites* appear to be almost confined to the Euronotian region.

Messrs. Meyrick and Lower, in their recent Revision of the Australian *Hesperiidae* (R.A.H.), recognise 79 species, with 29 unrecognised and reputed Australian forms: they estimate that the number will eventually reach 100 species. This revision has supplied a much-felt want, but I cannot agree with all the conclusions arrived at; several names are sunk as synonyms without any reason being assigned, and an examination of published descriptions does not appear to confirm their view; their localities in some instances do not agree with my own experience. The use of large genera in this family, where many forms are typically Australian, is worthy of note, for the sexual male stigma forms at once a well-defined character to distinguish *Hesperilla* from *Trapezites*. In this family, with a few alterations in the sequence of species, and extending or diminishing the range, I have followed Messrs. Meyrick and Lower (R.A.H.), and have indicated where I differ from them. Their use of the genera *Telicota* and *Erynnis* does not appear much better than the old *Pamphila*, as they do not use those genera as restricted by Watson or Elwes and Edwards.

Where many species are so superficially alike, there is little wonder that a great number of unrecognised species occur,

especially as many of the earlier authors have contented themselves with the shortest and most vague of descriptions. Entomologists are urged to make this family a special study, and to gather a large amount of thoroughly authenticated material as to dates and locality.

The genera *Hesperilla* and *Trapezites* will in the future have to be divided, when Watson's suggestions will be of great value.

#### 71. CASYAPA, Kirby.

Cat. Diurn. Lep. p. 576, 1871; R.A.H. p. 40.

Of large size; differs from *Phænicops*, in that the male has a costal fold to the forewing.

**C.** CRITOMEDIA (HESPERIA CRITOMEDIA), Guer. Voy. Coq. ii. pl. 18, f. 6, 1829; R.A.H. p. 40; *Thymele odix*, Boisd. Voy. Astr. Lep. p. 160, 1832; *Chaetocneme caristus*, Hew. Desc. Hesp. p. 21, 1867.

*Hab.* Cape York to Herberton, Brisbane (?).

#### 72. PHÆNICOPS, Watson.

P.Z.S. 1893, p. 30.

250. P. BEATA (NETROCORYNE BEATA), Hew. Desc. Hesp. p. 22, 1867; Exot. Butt. v. Hesp. f. 2, 3, 1874; R.A.H. p. 41.  
*Hab.* Cooktown to Wollongong.

P. DENITZA (NETROCORYNE DENITZA), Hew. Desc. Hesp. p. 22, 1867; Exot. Butt. v. Hesp. f. 4, 1874; Staud. Exot. Schmett. pl. 100, 1888; R.A.H. p. 42.

*Hab.* Cardwell to Brisbane, Port Darwin.

P. PORPHYROPIS, Meyrick and Lower R.A.H. p. 43.

*Hab.* Johnstone R., Queensland.

#### 73. NETROCORYNE, Felder.

Reise Nov. Lep. iii. p. 507, 1867; R.A.H. p. 43.

N. REPANDA, Feld. Reise Nov. Lep. iii. p. 507, pl. 70, f. 10, 1867; Math. Trans. Ent. Soc. Lond. 1888, p. 181, pl. 6, f. 5; R.A.H. p. 43; *Goniloba vulpecula*, Pritt. Stett. Ent. Zeit. p. 187, pl. 3, f. 2a, b, 1868.

*Hab.* Cooktown to Sydney.

#### 74. TAGIADES, Hübner.

Verz. bekannt. Schmett. p. 108, 1816; R.A.H. p. 45.

T. JANETTA, Butler Trans. Ent. Soc. Lond. 1870; p. 519; R.A.H. p. 45; *T. gamelia*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 146.

*Hab.* Brisbane (?) to Cape York.

## 75. MESODINA, Meyrick.

Ent. Mo. Mag. xxxvii. p. 168, 1901; R.A.H. p. 46.

255. M. AELUROPIST, Meyr. Ent. Mo. Mag. xxxvii. p. 168, 1901; R.A.H. p. 46.

This is a mountain species, and so far has only been bred in October and November.

*Hab.* Katoomba and Mt. Kembla, N.S.W.

M. HALYZIA (HESPERILLA HALYZIA), Hew. Desc. Hesp. p. 38, 1868; Exot. Butt. v. f. 4-6, 1874; Vict. Butt. ii. p. 125, 1894; R.A.H. p. 47.

This is a coastal as well as a mountain form, and is not the species to which Miskin referred as *H. halyzia*.

*Hab.* Sydney, Victoria, Perth.

## 76. HESPERILLA, Hewitson.

Desc. Hesp. p. 37, 1868; *Telesto* (nom. præocc.) Boisd. Voy. Astr. Lep. p. 164, 1832; Plötz Stett. Ent. Zeit. 1884, p. 376; R.A.H. p. 48.

Most authors have overlooked the fact that *Telesto* had been used in 1812 in *Tubularina*, and again in 1814 in *Crustacea*. I have therefore used *Hesperilla* to include all the species with a discal stigma in the male, being those species placed in *Telesto* by Meyrick and Lower.

H. ORNATA, Leach Zool. Misc. i. p. 126, pl. 55, f. 1-3, 1815; Math. Trans. Ent. Soc. Lond. 1888, p. 187; Aust. Butt. p. 41, 1889; Vict. Butt. ii. p. 120, 1894; R.A.H. p. 53.

*Hab.* Victoria, N.S.W. to Cooktown.

H. PERORNATA, Kirby Ann. Mag. Nat. Hist. 1893, p. 437; Vict. Butt. ii. p. 121, 1894; R.A.H. p. 52.

This is a mountain form; the early stages are quite distinct from *H. ornata*. I doubt if this is really distinct from *H. munionga*.

*Hab.* Victoria, Blue Mts., N.S.W.

H. MUNIONGA, Oll. P.L.S.N.S.W. 1889, p. 623; R.A.H. p. 56.

*Hab.* Mount Kosciusko, N.S.W.

260. H. PICTA, Leach Zool. Misc. p. 126, pl. 55, f. 4, 5, 1815; Math. Trans. Ent. Soc. Lond. 1888, p. 185, pl. 6, f. 9, 9a.; Vict. Butt. ii. p. 121, 1894; R.A.H. p. 57.

*Hab.* Victoria to Brisbane.

H. MASTERSI, Waterh. P.L.S.N.S.W. 1900, p. 54, pl. 1, f. 5-8; R.A.H. p. 55.

*Hab.* Blue Mts., Illawarra, N.S. Wales.

H. CRYPSARGYRA (*TELESTO CRYPSARGYRA*), Meyr. P.L.S.N.S.W. 1887, p. 829; R.A.H. p. 58.

A mountain species.

*Hab.* Blue Mts., N.S. Wales.

H. MONTICOLÆ, Oll. P.L.S.N.S.W. 1889, p. 624; R.A.H. p. 62; Waterh. Vict. Nat. 1903, p. 52.

A mountain species.

*Hab.* Walhalla, Victoria, Kosciusko, N.S. Wales.

H. DRACHMOPHORA (*TELESTO DRACHMOPHORA*), Meyr. Ent. Mo. Mag. 1885, p. 82; R.A.H. p. 61.

Probably a mountain species.

*Hab.* Tasmania, Kosciusko, N.S. Wales.

265. H. DOMINULA (*TELESTO DOMINULA*), Plötz Stett. Ent. Zeit. 1884, p. 379; R.A.H. p. 61.

*Hab.* Tasmania.

H. COMPACTA, Butler Ann. Mag. Nat. Hist. 1882, p. 87; R.A.H. p. 77; *Hesperilla scepticalis*, Rosen. Ann. Mag. Nat. Hist. 1885, p. 379, pl. 11, f. 2.

*Hab.* Victoria to Newcastle, Port Darwin.

H. CHAOSTOLA (*TELESTO CHAOSTOLA*), Meyr. P.L.S.N.S.W. 1887, p. 830; R.A.H. p. 65.

*Hab.* Blue Mts., N.S. Wales, Tasmania.

H. SEXGUTTATA (*TELESTO SEXGUTTATA*), Herr-Schiff. Stett. Ent. Zeit. 1869, p. 80, pl. 3, f. 16; R.A.H. p. 74.

*Hab.* Brisbane, Bowen, Rockhampton, Queensland.

H. PERONII (*HESPERIA PERONII*), Latr. Enc. Meth. ix, p. 763, 1823; R.A.H. p. 75; *Tel. kochii*, Feld. Verh. Zool. Bot. Ges. xii, p. 491, 1862; *Hesperilla doclea*, Hew. Desc. Hesp. p. 39, 1868.

I think it improbable that *T. arsenia* Plötz is this species.

*Hab.* Victoria, N.S. Wales to Mackay, Queensland.

270. H. CRYPSIGRAMMA (*TELESTO CRYPSIGRAMMA*), Meyrick and Lower R.A.H. p. 81.

*Hab.* Herberton, Queensland.

H. PARVULUS (*Telesto parvulus*) Plötz Stett. Ent. Zeit. 1884, p. 379; *H. humilis*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 150; *T. ismene*, Newn. MS.; Vict. Butt. ii. p. 128, 1894; R.A.H. p. 73.

If, as Meyrick and Lower admit, *ismene* is only an MS. name, it cannot be used.

*Hab.* Victoria, N.S. Wales to Mackay.

H. DOUBLEDAYI (TELESTO DOUBLEDAYI), Feld. Verh. Zool. Bot. Ges. xii, p. 491, 1862; Vict. Butt. ii. p. 126, 1894; R.A.H. p. 72; *Hesp. dirphia*, Herr-Schff. (nec. Hew.) Stett. Ent. Zeit. 1869, p. 79, pl. 3, f. 10; *Tel. leachi*, Feld. Verh. Zool. Bot. Ges. xii. p. 491, 1862.

*Hab.* Victoria, N.S. Wales to Cairns, Queensland.

H. ANDERSONI (TELESTO ANDERSONI), Kirby Ann. Mag. Nat. Hist. 1893, p. 434; Vict. Butt. ii. p. 118, 1893; R.A.H. p. 66.

*Hab.* Victoria to Mt. Kembla, N.S. Wales.

H. LEUCOSTIGMA (TELESTO LEUCOSTIGMA), Meyrick and Lower R.A.H. p. 73.

*Hab.* Sydney to Cairns.

275. H. TYMBOPHORA (TELESTO TYMBOPHORA), Meyrick and Lower R.A.H. p. 70.

\* I am of opinion that the female of this is *Tel. arsenia*, Plötz.

*Hab.* Mt. Kembla, N.S. Wales.

H. FLAMMEATA (TELESTO FLAMMEATA), Butler Ann. Mag. Nat. 1882, p. 85; Vict. Butt. ii. p. 124, 125, 1893; R.A.H. p. 69; *Tel. eclipsis*, Butl. Ann. Mag. Nat. Hist. 1882, p. 86; *Hesperilla atromacula*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 148.

*Hab.* Victoria to Sydney, N.S. Wales.

H. ATRALBA, Tepper Trans. Roy. Soc. S.A. 1881, p. 33, pl. 2, f. 5; R.A.H. p. 71; *Tel. dactyliota*, Meyr. P.L.S. N.S.W. 1887, p. 831.

*Hab.* S. Australia, Geraldton, W. Australia.

H. IDOTHEA (TRAPEZITES IDOTHEA), Misk. Proc. Roy. Soc. Q'ld. 1889, p. 152; Vict. Butt. ii. p. 116, 1894; R.A.H. p. 68; *Telesto dispar*, Kirby Ann. Mag. Nat. Hist. 1893, p. 436; Vict. Butt. ii. p. 117, 1894.

*Hab.* Tasmania, Victoria, Blue Mts., N.S. Wales.

H. DIRPHIA, Hew. Desc. Hesp. p. 38, 1868; Exot. Butt. v. f. 1-3, 1874; R.A.H. p. 60; *Hesp. trimaculata*, Tepper Trans. Roy. Soc. S.A. 1881, p. 32, pl. 2, f. 1; *Hesp. quadrimaculata*, Tepper l. c. pl. 2, f. 2.

*Hab.* W. Australia, S. Australia, Victoria, N.S. Wales, Cape York (?)

280. T. CHRYSOTRICA (TELESTO CHRYSOTRICA), Meyrick and Lower R.A.H. p. 59.

*Hab.* S. W. Australia.

H. DONNYSIA, Hew. Desc. Hesp. p. 39, 1868; Exot. Butt. v. f. 7, 1874; Vict. Butt. ii. p. 102, 1874; R.A.H. p. 64.

*Hab.* Tasmania, Victoria, S. Australia, Sydney.

- H. CYCLOSPILA (*TELESTO CYCLOSPILA*), Meyrick & Lower R.A.H. p. 63.  
*Hab.* S. Australia, Victoria.
- H. XANTHOMERA (*TELESTO XANTHOMERA*), Meyrick & Lower R.A.H. p. 80.  
I doubt if this species extends to N.S.W. and Victoria.  
*Hab.* Cairns to Brisbane, Queensland.
- H. SENTA, Misk. Syn. Cat. Rhop. Aust. Suppt. 1891 ; R.A.H. p. 78.  
*Hab.* Cooktown to Cairns.
285. H. CROCEUS, Misk. Pro. Roy. Soc. Q'ld. 1889, p. 150 ; R.A.H. p. 79.  
*Hab.* Brisbane to Cairns.
- H. BATHROPHORA (*TELESTO BATHROPHORA*), Meyrick & Lower R.A.H. p. 82.  
This is the species Miskin called *H. halyzia*, Hew.  
*Hab.* Cairns to Rockhampton.
- H. MELANIA (*TELESTO MELANIA*), Waterh. Vict. Nat. 1903, p. 54.
77. TRAPEZITES, Hübner.
- Verz. bekannt. Schmett. p. 112, 1816 ; R.A.H. p. 83.  
This genus differs from *Hesperilla* by the absence of the discal male stigma.
- T. HETEROMACULA (also spelt HELIOMACULA) Meyrick & Lower R.A.H. p. 84.  
*Hab.* Cape York to Cooktown.
- T. PETALIA (*HESPIRIA PETALIA*), Hew. Descr. Hesp. p. 32. 1868, Herr-Schff. Stett. Ent. Zeit. 1869, p. 80, pl. 3, f. 11 ; R.A.H. p. 85 ; *T. megalopis*, Meyr. P.L.S.N.S.W. 1887, p. 832.  
*Hab.* Sydney to Mackay.
290. T. LUTEA, Tepper Trans. Roy. Soc. S.A., 1887, p. 33, pl. 2, f. 6 ; R.A.H. p. 90.  
*Hab.* S. Australia, Tasmania, N.S. Wales.
- T. IACCHUS (*PAPILIO IACCHUS*) Fabr. Syst. Ent. p. 533, 1775 ; Don. Ins. New Holl. pl. 31, f. 1, 1805 ; Vict. Butt. ii. p. 115, 1894 ; R.A.H. p. 87 ; *H. eliena*. Hew. Desc. Hesp. p. 32, 1868  
I think there is little doubt that *elienna* is identical with *iacchus* as represented by Donovan's figure (that being the Northern form); and that the Southern form, which is undoubtedly distinct, is unnamed.  
*Hab.* Cape York to Brisbane, S. Australia, Victoria, Tasmania, N.S. Wales.

T. SYMMOMUS, Hübn. Zutr. Exot. Schmett. f. 225, 226, p. 1823; Math. Trans. Ent. Soc. 1888, p. 183; Staud. Exot. Schmett. pl. 100, 1888; Vict. Butt. p. ii. 114, 1894; R.A.H. p. 86.

Meyrick & Lower give *Telesto praxedes*, Plötz, as a synonym without assigning any reason, but Plötz's remarks do not point to this species.

*Hab.* Victoria, N.S. Wales, Brisbane.

T. MAHETA (HESPERIA MAHETA), Hew. Ann. Mag. Nat. Hist. 1877, p. 80; R.A.H. p. 89; Waterh. Vict. Nat. 1903, p. 54. *T. phlaea*, Plötz Stett. Ent. Zeit. 1884, p. 378, female; *T. praxedes*, Plötz l. c. p. 379, male.

*Hab.* N.S. Wales, Brisbane to Cairns.

Var. PHIGALIOIDES, Waterh. Vict. Nat. 1903, p. 56.

*Hab.* Victoria.

Var. IACCHOIDES, Waterh. l. c. p. 56, 57.

*Hab.* Near Sydney.

T. PHIGALIA (HESPERIA PHIGALIA), Hew. Desc. Hesp. p. 32, 1868; R.A.H. p. 94; *T. phillyra*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 153.

*Hab.* S. Australia, Victoria, N.S. Wales.

295. T. TASMANICUS (HESPERILLA TASMANICUS) Misk. Proc. Roy. Soc. Q'ld. 1889, p. 149; Vict. Butt. ii. p. 128, 1894; R.A.H. p. 96; *Telesto comma*, Kirby Ann. Mag. Nat. Hist. 1893, p. 436.

*Hab.* Tasmania, Victoria, Mt. Kembla, N.S. Wales.

T. CYNONE (CYCLOPIDES CYNONE), Hew. Exot. Butt. v., f. 17, 1874; Vict. Butt. ii. p. 113, 1894; *Pamphila gracilis*, Tepp. Trans. Roy. Soc. S.A. 1881, p. 34, pl. 2, f. 7; R.A.H. p. 93.

*Hab.* S. Australia, Victoria.

T. CROITES (CYCLOPIDES CROITES), Hew. Exot. Butt. v., f. 14, 1874; R.A.H. p. 88.

It would be advantageous if the type were re-described and re-figured.

*Hab.* W. Australia.

T. ARGENTEO-ORNATUS (CYCLOPIDES ARGENTEO-ORNATUS), Hew. Desc. Hesp. p. 41, 1868; Exot. Butt. v. f. 18, 19, 1874; R.A.H. 91.

*Hab.* S.W. Australia.

T. SPHENOSEMA, Meyrick & Lower R.A.H. p. 92.

*Hab.* S.W. Australia.

300. T. PARAPHAES, Meyrick & Lower R.A.H. p. 93.

Very doubtfully distinct from *sphenosema*.

Hab. S.W. Australia.

78. EXOMETOECA, Meyrick.

- P.L.S.N.S.W. 1887, p. 833; R.A.H. p. 97.

- E. NYCTERIS, Meyr. P.L.S.N.S.W. 1887, p. 833; R.A.H. p. 97.

Hab. S.W. Australia.

79. APAUSTUS, Hübner.

- Verz. bekannt. Schmett. p. 113, 1816; R.A.H. p. 98.

- A. PAPYRIA (HESPERIA PAPYRIA), Boisd. Voy. Astr. Lep. p. 166, 1832; R.A.H. p. 98; (*Taractrocera papyria*) Vict. Butt. ii. p. 129, 1894; *Taractrocera celæno*, Cox. Entom. 1873, p. 402; *Hesperilla fumosa*, Guest Trans. Roy. Soc. S.A. 1882, p. 37; *Ap. alix*, Plötz Stett. Ent. Zeit. 1884, p. 165; *Ap. minimus*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 153.

Hab. W. Australia. S. Australia, Tasmania, Victoria, N.S. Wales.

- A. FLAVOVITTATA (HESPERIA FLAVOVITTATA), Latr. Enc. Méth. ix. p. 768, 1823; R.A.H. p. 100.

It is probable that *Ap. papyria* is a geographical form of this.  
Hab. S.W. Australia.

- A. LASCVIA (PAMPHILA LASCVIA), Rosen. Ann. Mag. Nat. Hist. 1885, p. 378, pl. 11, f. 1; Vict. Butt. p. 113, 1894; Waterh. P.L.S.N.S.W. 1897, p. 244; R.A.H. 100.

305. A. SUNIAS (PAMPHILA SUNIAS), Feld. Sitzb. Akad. Wiss. Wien Math. Nat. Cl. p. 462, 1860; R.A.H. p. 101; *Ancyloxypha agraulia*, Hew. Desc. Hesp. p. 45, 1868; Oll. Ann. Mag. Nat. Hist. 1888, p. 360, pl. 20, f. 3a, 3b; *Ocybadistes walkeri*, Heron Ann. Mag. Nat. Hist. xiv. 1894, p. 106.

Hab. S. Australia, N.S. Wales, Brisbane to Cooktown, Port Darwin.

80. TELICOTA, Moore.

- Lep. Cey. i., p. 169, 1880-1; R.A.H. p. 102.

- T. MARNAS, Feld. Sitzb. Akad. Wiss. Wien Math. Nat. Cl. p. 462, 1860; R.A.H. p. 103.

Hab. Queensland.

- T. OHARA (HESPERILLA OHARA), Plötz Stett. Ent. Zeit. 1883, p. 226; R.A.H. p. 104.

Hab. Queensland.

T. AUGIAS (PAPILIO AUGIAS), Linn. Syst. Nat. xii, p. 749, 1767; Dist. Rhop. Malay p. 382, pl. 34, f. 23, 1886; R.A.H. p. 105; *Pamphila kreftii*, Macleay Proc. Soc. N.S.W. 1866, p. liv.

*Hab.* Sydney to Cape York, Port Darwin.

T. BAMBUSÆ (PAMPHILA BAMBUSÆ), Moore P.Z.S. 1878, p. 691, pl. 45, f. 11; Dist. Rhop. Malay p. 382, pl. 35, f. 12, 1886; R.A.H. p. 107; *P. pythias*, Mab. Pet. Nov. ii., p. 234, 1878.

*Hab.* Brisbane to Cape York.

### 81. ERYNNIS, Schrank.

Fauna Boica ii. 1, p. 152, 1801; R.A.H. p. 108.

Meyrick and Lower appear to have done little, if anything, to clear up our difficulties with this and the preceding genus, and until the types are accurately figured and described confusion must still remain. I have two species in my cabinet not included in this list.

310. E. ANGUSTULA (PAMPHILA ANGUSTULA), Herr-Schff. Stett. Ent. Zeit. 1869, p. 79; R.A.H. p. 109.

*Hab.* Mackay.

E. PALMARUM (PAMPHILA PALMARUM), Moore P.Z.S. 1878, p. 690, pl. xlv., f. 6, 7; R.A.H. p. 110.

If Moore's figures of the sexes are correct, then this species has not yet been correctly recorded from Australia. I have undoubted orange females.

*Hab.* Mackay to Cooktown.

E. SPERTHIAS (HESPERIA SPERTHIAS), Feld. Verh. Zool. Bot. Ges. xii, p. 492, 1862; R.A.H. p. 113; *Pamphila ulama*, Butler Trans. Ent. Soc. Lond. p. 504, 1870; *Corone ismenooides*, Mab. Pet. Nouv. Ent. ii, p. 204, 1878.

For the last five years I have bred orange males and brown females from larvæ feeding on the same palm, which is to my mind conclusive evidence of these being sexes of the one species.

*Hab.* Sydney to Cape York.

E. MACLEAYI (HESPERILLA MACLEAYI), Plötz Stett. Ent. Zeit. 1883, p. 225; ? *Pamphila autoleon*, Misk. Proc. Soc. Q'ld. 1889, p. 147; R.A.H. p. 112.

*Hab.* Brisbane to Cairns.

E. OLIVESCENS (PAMPHILA OLIVESCENS), Herr-Schff. Stett. Ent. Zeit. 1869, p. 79, pl. 3, f. 14; ? R.A.H. p. 114.

*Hab.* Queensland.

315. E. FULGIDA (HESPERILLA FULGIDUS), Misk. Proc. Roy. Soc. Q'ld. 1889, p. 151; R.A.H. p. 116.

*Hab.* Brisbane to Cairns.

E. FULIGINOSA (*PAMPHILA FULIGINOSA*), Misk. Proc. Roy. Soc. Q'ld. 1889, p. 147; Syn. Cat. Rhop. Aust. p. 76, 1891; R.A.H. p. 115.

*Hab.* Mackay to Cairns.

E. MATHIAS (*HESPERIA MATHIAS*), Fabr. Ent. Syst. Suppt. p. 433, 1798; R.A.H. p. 117.

*Hab.* Brisbane to Cape York, Port Darwin.

E. COLACA (*HESPERIA COLACA*), Moore P.Z.S. 1877, p. 594, pl. 58, f. 7.

At once distinguished from *E. mathias* by the absence of discal male stigma.

*Hab.* Mackay, Cairns.

E. CÆSINA (*CARYSTUS CÆSINA*), Hew. Trans. Ent. Soc. Lond. 1866, p. 491; Exot. Butt. v. pl. 6, f. 15, 1866; R.A.H. p. 118; *Pamphila albifascia*, Misk. Proc. Roy. Soc. Q'ld. 1889, p. 148.

*Hab.* Cairns.

#### 82. NOTOCRYPTA, de Nicéville.

Journ. Bomb. Nat. Hist. Soc. 1889, p. 188; R.A.H. p. 119.

320. N. FEISTHAMELII (*THYMELE FEISTHAMELII*), Boisd. Voy. Astr. Lep. p. 159, pl. 2, f. 7, 1832; R.A.H. p. 119.

*Hab.* Mackay to Cape York.

#### 83. BADAMIA, Moore.

Lep. Cey. i. p. 156, 1881; R.A.H. p. 120.

B. EXCLAMATIONIS (*PAPILIO EXCLAMATIONIS*), Fabr. Syst. Ent. p. 530, 1775; Moore Lep. Cey. i. p. 157, pl. 66, f. 2a, 2b, 1881; R.A.H. p. 120.

*Hab.* Sydney to Cape York.

#### 84. HASORA, Moore.

Lep. Cey. i. p. 159, 1881; R.A.H. p. 121.

H. DISCOLOR (*GONILOBA DISCOLOR*), Feld. Wien Ent. Mon. p. 405, 1859; R.A.H. p. 123; *Ismene discolor*, Feld. Reise. Nov. Lep. iii. pl. 72, f. 17, 1867.

*Hab.* Richmond R. to Cooktown.

H. DOLESCHALLII (*ISMENE DOLESCHALLII*), Feld. Sitzb. Akad. Wiss. Wien Math. Nat. Cl. p. 460, 1860; Reise Nov. Lep. iii. pl. 72, f. 16, 1867; R.A.H. p. 126.

H. BILUNATA, Butl. Ann. Mag. Nat. Hist. 1883, p. 391; R.A.H. p. 122.

*Hab.* Queensland.

325. H. HURAMA (*HESPERIA HURAMA*), Butl. Trans. Ent. Soc. Lond. p. 498. 1870; Lep. Exot. p. 166, pl. 59, f. 10, 1874; R.A.H. p. 124.  
*Hab.* N. Queensland.

H. LUCESCENS (*ISMENE LUCESCENS*), Lucas Proc. Roy. Soc. Q'ld. 1900, p. 138; R.A.H. p. 122.

This is probably the *I. contempta*, Plötz.

*Hab.* Cairns, Cooktown.

H. CHROMUS (*PAPILIO CHROMUS*), Cram. Pap. Exot. pl. 284, f. E, 1782; *Parata chromus*, Moore Lep. Cey. i. p. 161, pl. 65, f. 1, 1881; R.A.H. p. 125.

*Hab.* Brisbane to Mackay.

H. LUGUBRIS (*THYMELE LUGUBRIS*), Boisd. Voy. Astr. Lep. p. 160, 1832; R.A.H. p. 124.

*Hab.* Cape York.

#### 85. EUSCHEMON, Doubleday.

Stoke's Aust. App. p. 513, 1846.

E. RAFFLESIA (*HESPERIA RAFFLESIA*), Macl., King's Surv. Aust. ii. p. 463, 1827; Gen. Diurn. Lep. pl. 80, f. 5, 1850-2; Staud. Exot. Schmett. pl. 100, 1888; var. *albo-ornatus*, Oll. P.L.S.N.S.W. 1891, p. 30.

The early stages of this insect are to my mind sufficient to place it amongst the Rhopalocera, in spite of the presence of a frenulum.

*Hab.* Richmond R. to Cairns.



## INDEX TO GENERA.

NOTE.—Small capitals indicate Australian genera; italics indicate synonyms and extra-Australian genera; while roman letters indicate sub-genera.

	No.		No.
ABISARA ...	27	DELIAS ...	65
Acidalia ...	7	Deragenia ...	2
ACRÆA... ...	4	DEUDORIX ...	56
<i>Amblypodia</i> ...	51	<i>Diadema</i> ...	15
<i>Ancycloxypha</i> ...	79	DOLESCHALLIA ...	14
Anosia... ...	1	Doricha ...	2
APAUSTUS ...	79	ELODINA ...	61
APPIAS ...	64	<i>Epineophile</i> ...	21
ARGYNNIS ...	7	<i>Erina</i> ...	35
ARHOPALA ...	51	ERYNNIS ...	81
ATELLA ...	9	<i>Euchrysops</i> ...	40
BADAMIA ...	83	EUPLEA ...	2
BELENOIS ...	62	EUPSYCHELLUS ...	28
BINDAHARA ...	58	EURYCUS ...	70
<i>Callidyras</i> ...	66	EUSCHEMON ...	85
Calliploëa ...	2	EVERES ...	45
Calysisme ...	19	EXOMETOECA ...	78
CANDALIDES ...	35	Gamatoba ...	2
<i>Carystus</i> * ...	81	Goniloba ...	73, 84
CASYAPA ...	71	<i>Hamadryas</i> ...	3
CATOCHRYSOPS ...	40	HASORA ...	84
CATOPSILIA ...	66	<i>Hesperia</i> ...	76, 77, 79, 84, 85
CETHOSIA ...	5	HESPERILLA ...	75, 76
Chanapa ...	2	HETERONYMPHA ...	24
CHARAXES ...	18	Hirdapa ...	2
CHILADES ...	42	<i>Holochila</i> ...	35
<i>Chrysophanus</i> ... ...	49	HUPHINA ...	63
Corone... ...	81	<i>Hypochnysops</i> ...	34
CUPHA... ...	8	HYPOCYSTA ...	23
CYANIRIS ...	31	HYPOLIMNAS ...	15
<i>Cyclopides</i> ...	77	HYPOLYCÆNA ...	55
CYNTHIA ...	6	IALMENUS ...	52
<i>Danais</i> ...	1	<i>Ismene</i> ...	84
DANAUS ...	1	JAMIDES ...	44
DANIS ...	32	JUNONIA ...	11

	No.		No.
LAMPIDES	33	PRECIS...	12
<i>Lassiomata</i>	25	PSEUDALMENUS	53
LIBYTHEA	26	PSEUDODIPSAS	37
Limnas	1	PSEUDONOTIS	54
LIPHYRA	59	PYRAMEIS	10
LUCIA	49	Rahinda	17
LYCÆNESTHES	38	RAPALA	57
<i>Lycænopsis</i>	31	RHINOPALPA	13
MEGISBA	30	Salatura	1
MELANITIS	20	Salpinx	2
MENELAIDES	69	Sterosis	59
MESODINA	75	Sospita	27
<i>Messaras</i>	8	Tachyris	64
MILETUS	34	TAGIADES	74
MYCALESIS	19	Taractocera	75
Mydosama	19	TARUCUS	41
MYNES...	16	Telesto	76
NACADUBA	46	TELICOTA	80
NEOPITHECOPS	29	TELLERVO	3
NEPTIS	17	TERIAS	60
NETROCORYNE	72, 73	THECLINESTHES	47
NOTOCRYPTA	82	Thyca	65
<i>Ocybadistes</i>	79	Thymele	71, 84
OGYRIS	50	Thysanotis	32
Ornithoptera	67	Tirumala	1
Orsotriæna	19	TISIPHONE	21
Pamphila	80, 81	TRAPPZITES	76, 77
PAPILIO	68	TROIDES	67
Parapithecopis	29	Utica...	47
Pathalia	30	UNA	48
PHILIRIS	36	Vadebra	2
PHÆNICOPS	72	XENICA	25
Pieris	61, 62, 63, 64	YPTHIMA	22
POLYOMMATUS	39	ZIZERA...	43
Pontia...	66		

GWO

# New South Wales Naturalists' Club.

---

THE N.S.W. NATURALISTS' CLUB has been founded with a view of bringing together those who take an interest in the various branches of Natural History. Its objects are to give lovers of Natural History opportunities of meeting together to discuss the subjects in which they are mutually interested, and to give one another help and encouragement in the pursuit of their studies. Students will be encouraged to form Collections, and to investigate the Geographical Distribution and Life-Histories of Animals and Plants. Every possible assistance by advice and technical information will be given to Members in the pursuit of their studies, especially in the collection, preservation, and naming of Specimens.

Meetings are held monthly, at which popular accounts are given of the Animals, Plants, and Rocks of the District; Specimens are exhibited, interesting observations noted; questions answered and discussion encouraged. These Meetings afford Members the opportunity of becoming known to each other, and of finding out those interested in their special branch of Natural History, besides learning of other branches than their own.

Monthly Excursions, under the guidance of special leaders, are also made to the best Collecting Grounds and most interesting spots around Sydney. As the County of Cumberland is remarkably rich in such localities, the Excursions, which take place on Saturdays and occasionally on Public Holidays, furnish excellent opportunities for the study of Zoology, Botany and Geology. At these Excursions, Members are shown the types of "hunting ground," which produce most and rarest Species, and it is hoped by these means that they will be encouraged to search out fresh Collecting Spots for themselves, for it is not anticipated that they will confine their Collecting Trips solely to the set Excursions of the Club. For the benefit of others, the material obtained at these Excursions is exhibited at the Meetings, when all can learn from the efforts of one Member. Sydney, both in its Marine and Entomological Fauna gives many opportunities for the discovery of new and rare Species; and also in its wealth of Flowers, the Botanist will find great scope for employment.

---

"Australian Butterflies," by A. S. OLLIFF, Price One Shilling; and "Plants Indigenous and Naturalised in the Neighbourhood of Sydney," by Dr. WOOLLS, Price Eighteenpence, may be obtained from the HONORARY SECRETARY at the Monthly Meeting, or by application by letter to Box 1216 G.P.O.

MEMOIRS  
OF THE  
**New South Wales Naturalists' Club,**

NO. 2.

---

A

SYNOPSIS

OF THE

FISHES OF NEW SOUTH WALES,

BY

EDGAR R. WAITE, F.L.S.,

Zoologist, Australian Museum, Sydney.

---

PRICE TWO SHILLINGS.

---

SYDNEY :  
7TH NOVEMBER, 1904.



2d set



Naturalists' society of New South Wales, Sydney.

# MEMOIRS

OF THE

## New South Wales Naturalists' Club,

No. 2.

---

A

## SYNOPSIS

OF THE

## FISHES OF NEW SOUTH WALES,

BY

EDGAR R. WAITE, F.L.S.,

Zoologist, Australian Museum, Sydney.

---

PRICE TWO SHILLINGS.

---

SYDNEY:

7TH NOVEMBER, 1904.

2d set

Collected Set



Lod ser.  
Lod 94 Aug 35 anal  
CP 14 Sept. 35

QH1  
N48  
2d set

## INTRODUCTION.

THERE is an attractive tendency towards increased subdivision in the matter of classification, the ultimate consequence of which would be for each species to become the type of a genus, and each genus of a family. Mr. G. A. Boulenger has recently raised the status of the family in Teleostomi, by making it more inclusive, and in the present catalogue I willingly adopt his classification.\* The new arrangement of the genera has not yet been published, and the number here included is doubtless greater than will be ultimately admitted. Notwithstanding the fact that all the genera to which our species have been assigned are not included, the average number of species in a genus is still under two.

Of omitted genera I may instance the following:—*Gyropleuroodus*, *Euristhmus*, *Scolecenchelys*, *Incisidens*, *Sillaginodes*, *Parhaplodactylus*, *Paristiopterus*, *Microcanthus*, *Pictilabrus*, and *Thysanophrys*.

The only catalogue previously published, which dealt exclusively and wholly with the Fishes of New South Wales, was issued eighteen years ago.† Though on the one hand many species since described are now included; on the other a number are removed from the list pending more satisfactory evidence of their occurrence within the boundaries of the State.

A mere list of Fishes would not have fulfilled the objects of the Memoir, while the space limit placed upon the publication

Vol. 2

\* *Zoological Record*, 1902.

† *Catalogue of the Fishes of New South Wales, with their principal synonyms*, by J. Douglas Ogilby, Sydney, 1886.

precluded the possibility of giving any synonymy. The "synopsis" therefore supplies reference to the original description and author, and indicates where a figure may be consulted.

Particular attention has been given to authorities and dates, but the names, in some instances, may not be strictly in accord with the rules of Zoological nomenclature: for example:—some of Lacépède's designations are not in Latin form, but not having a complete copy of the original edition of this scarce work, I cannot always determine when such are untenable. The dates of Bloch are those of the original edition, published as "Oekon. Naturg. d. Fische Deutschlands," and "Naturg. d. ausländischen Fische," the work is quoted under the title "Ichtyologie."

E. R. W.

Australian Museum,  
Sydney, 31st August, 1904.

# THE FISHES OF NEW SOUTH WALES.

---

## Class I. LEPTOCARDII (Lancelets).

### Family BRANCHIOSTOMIDÆ.

BRANCHIOSTOMA, Costa, 1834.

1. B. BASSANUM, Günth. Voy. Alert, Zool., 1884, p. 31. Kirkaldy, Q.J.M.S., xxxvii n.s., pl. 34, fig. 6. (Southern Lancelet).

## Class II. MARSIPOBANCHII (Lampreys).

### Family MORDACIIDÆ.

MORDACIA, Gray, 1851.

2. M. MORDAX, Rich. Voy. Ereb. and Terr., 1846, p. 62, pl. xxxviii, fig. 3-6. (Short-headed Lamprey.)

## Class III. PISCES (Fishes).

### Sub-Class. SELACHII (Sharks and Rays).

#### Diplospondyli.

##### Family NOTIDANIDÆ.

NOTORHYNCHUS, Ayres, 1856.

3. N. INDICUS, Agass. Poiss. Foss. Feuilleton, 1835, p. 71. McCoy, Prod. Z. Vict. dec. v, pl. 43, fig. 2. (Seven-gilled Shark.)

### **Asterospondyli.**

#### **Family HETERODONTIDÆ.**

HETERODONTUS, Blainv., 1816.

4. H. PHILIPPI, Bl. Schn. Syst. Ichth., 1801, p. 134. McCoy, Prod. Z. Vict. dec. xii, pl. 113. (Port Jackson Shark.)
5. H. GALEATUS, Günth. Cat. Fish. viii, 1870, p. 416. Macl. and Macl. P.L.S. N.S.W. iii, pl. xxv. (Crested Port Jackson Shark.)

#### **Family SCYLIORHINIDÆ.**

CATULUS, Smith, 1837.

6. C. ANALIS, Ogil. P.L.S. N.S.W. x, 1885, p. 445. Waite, Mem. Aust. Mus. iv, pl. ii, fig. 1. (Spotted Cat Shark.)

PARASCYLLIUM, Gill, 1861.

7. P. COLLARE, Rams. and Ogil. P.L.S. N.S.W. (2) iii, 1888, p. 1310. Waite, Mem. Aust. Mus. iv, pl. ii, fig. 2. (Collared Cat Shark.)

#### **Family GINGLYMOSTOMIDÆ.**

STEGOSTOMA, Müll. and Henle, 1837.

8. S. TIGRINUM, Gmel. Syst. Nat. ed. xiii, 1789, p. 1493. Day, Fish. India, pl. clxxxvii, fig. 4. (Zebra Shark.)

#### **Family HEMISCYLLIIDÆ.**

HEMISCYLLIUM, Müll. and Henle, 1838.

9. H. MODESTUM, Günth. P.Z.S. 1871, p. 654, pl. liv. (Blind Shark.)

ORECTOLOBUS, Bonap. 1836.

10. O. BARBATUS, Gmel. Syst. Nat. ed. xiii, 1789, p. 1493. McCoy, Prod. Z. Vict. dec. v, pl. 43, fig. 1. (Wobbegong.)

## Family CARCHARIIDÆ.

MUSTELUS, Linck, 1790.

11. M. ANTARCTICUS, Günth. Cat. Fish. viii, 1870, p. 387. McCoy, Prod. Z. Vict. dec. ix, pl. 87, fig. I. (Gummy.)
12. M. AUSTRALIS, Macl. P.L.S. N.S.W. vi, 1881, p. 354. McCoy, Prod. Z. Vict. dec. vii, pl. 64, fig. 2. (School Shark.)

GALEOCERDO, Müll. and Henle, 1837.

13. G. RAYNERI, McDon. and Bar. P.Z.S. 1868, p. 368, pl. xxxii. (Tiger Shark.)

PRIONACE, Cantor, 1850.

14. P. GLAUCA, Linn. Syst. Nat. ed. x, 1758, p. 235. Müll. and Henle, Plagiost. pl. xi. (Blue Shark.)

CARCHARIAS, Rafin. 1810.

15. C. BRACHYURUS, Günth. Cat. Fish. viii, 1870, p. 369. (Whaler.)
16. C. GANGETICUS, Müll. and Henle. Plagiost. 1838, p. 39, pl. xiii. (Sea Shark.)
17. C. MACLOTI, Müll. and Henle. Plagiost. 1838, p. 34, pl. x. (Long-nosed Sea Shark.)
18. C. TRICUSPIDATUS, Day, Fish. India, 1878, p. 713, pl. clxxxvi, fig. 1. (Blue Nurse.)

## Family SPHYRNIDÆ.

SPHYRNA, Rafin. 1810.

19. S. LEWINI, Lord, in Griffith, Anim. King. x, 1834, p. 640. McCoy, Prod. Z. Vict. dec. vi, pl. 56, fig. 1. (Hammer-headed Shark.)

### Family ALOPIIDÆ.

ALOPIAS, Rafin. 1810.

20. *A. VULPES*, Gmel. Syst. Nat. ed. xiii, 1789, p. 1496. McCoy, Prod. Z. Vict. dec. ix, pl. 88. (Thresher Shark.)

### Family ODONTASPIDIDÆ.

ODONTASPIS, Rafin. 1810.

21. *O. TAURUS*, Rafin. Carat. Alc. Nuovi Gen. 1810, p. 10. McCoy, Prod. Z. Vict. dec. vii, pl. 64, fig. 1. (Grey Nurse.)

### Family LAMNIDÆ.

ISUROPSIS, Gill, 1861.

22. *I. GLAUCA*, Müll. and Henle. Plagiost. 1838, p. 69, pl. xxix. (Blue Pointer.)

CARCHARODON, Smith, 1837.

23. *C. CARCHARIAS*, Linn. Syst. Nat. ed. x, 1758, p. 235. McCoy, Prod. Z. Vict. dec. viii, pl. 74. (White Pointer.)

### Family CETORHINIDÆ.

CETORHINUS, Blainv. 1816.

24. *C. MAXIMUS*, Gunner, Trondh., Selskab, iii, 1765, p. 33. McCoy, Prod. Z. Vict. dec. xi, pl. 104. (Basking Shark.)

### Cyclospondyli.

### Family SQUALIDÆ.

SQUALUS, Linn. 1758.

25. *S. MEGALOPS*, Macl. P.L.S. N.S.W. vi, 1881, p. 367. Waite, Rec. Aust. Mus. iv, pl. iv, fig. 2. (Dog Fish.)

## Family PRISTIOPHORIDÆ.

PRISTIOPHORUS, Müll. and Henle, 1837.

26. P. CIRRATUS, Lath. T.L.S. ii, 1794, p. 281, pls. xxvi, fig. 5, xxvii. (Saw Shark.)

## Family SQUATINIDÆ.

SQUATINA, Dum. 1806.

27. S. SQUATINA, Linn. Syst. Nat. ed. x, 1758, p. 233. McCoy, Prod. Z. Vict. dec. iv, pl. 34. (Angel Shark.)

## Batoidei.

### Family PRISTIDÆ.

PRISTIS, Linck, 1790.

28. P. ZYSRON, Bleek. Verh. Bat. Gen. xxiv, 1851, p. 55. Day, Fish. India, pl. cxcii, fig. 2. (Sawfish.)

### Family RHINOBATIDÆ.

RHYNCHOBATUS, Müll. and Henle, 1837.

29. R. DJIDDENSIS, Forsk. Descr. Anim. 1775, p. 18. Day, Fish. India, pl. excii, fig. 1. (White-spotted Ray.)

RHINOBATUS, Bl. Schn. 1801.

30. R. BANKSII, Müll. and Henle. Plagiost. 1838, p. 123. Waite, Mem. Aust. Mus. iv, pl. iii. (Shovel-nosed Ray.)

TRYGONORRHINA, Müll. and Henle, 1838.

31. T. FASCIATA, Müll. and Henle. Plagiost. 1838, p. 124, pl. xlivi. (Fiddler.)

### Family RAJIDÆ.

RAJA, Linn. 1758.

32. *R. AUSTRALIS*, Macl. P.L.S. N.S.W. viii, 1834, p. 461. Waite, Mem. Aust. Mus. iv, pl. iv. (Common Skate.)
33. *R. SCABRA*, Ogil. Cat. Fish. Aust. Mus. I, 1888, p. 17. (Great Skate.)
34. *R. NITIDA*, Günth. Voy. Chall. Zool. I, 1880, p. 27, pl. xiv, fig. A. (Skate.)

### Family NARCOBATIDÆ.

NARCINE, Henle, 1834.

35. *N. TASMANIENSIS*, Rich. P.Z.S. 1841, p. 22, and T.Z.S. iii, pl. xi, fig. 2. (Tasmanian Numb Fish.)

HYPNOS, Dum. 1852.

36. *H. SUBNIGRUM*, Dum. Rev. Mag. Zool. (2) iv, 1852, p. 279, pl. xii. (Numb Fish.)

### Family DASYATIDÆ.

UROLOPHUS, Müll. and Henle, 1837.

37. *U. CRUCIATUS*, Lacép. Ann. Mus. iv, 1804, p. 201, pl. iv, fig. 2. (Banded Stingaree.)

TRYGONOPTERA, Müll. and Henle, 1838.

38. *T. TESTACEA*, Müll. and Henle. Plagiost. 1838, p. 174, pl. lvii. (Common Stingaree.)
39. *T. BUCCULENTA*, Macl. P.L.S. N.S.W. ix, 1884, p. 172. Waite, Mem. Aust. Mus. iv, pl. v. (Great Stingaree.)

## DASYATIS, Rafin. 1810.

40. D. PASTINACA, Linn. Syst. Nat. ed. xii, 1766, p. 396. Bloch,  
Ichty. iii, pl. lxxxii. (Smooth Sting Ray.)
41. D. KUHLII, Müll. and Henle, Plagiost. 1838, p. 164, pl. li,  
fig. 2. (Blue-spotted Sting Ray.)
42. D. THETIDIS, Ogil. Mem. Aust. Mus. iv, 1899, p. 46. (Black  
Sting Ray.)

## PTEROPLATEA, Müll. and Henle, 1837.

43. P. AUSTRALIS, Rams. and Ogil. P.L.S. N.S.W. x, 1886, p. 575..

## Family MYLIOBATIDÆ.

## AËTOBATUS, Blainv. 1816.

44. A. NARINARI, Euphr. Vet. Ak. Nya. Handl. xi, 1790, p. 217.  
Day, Fish. India, pl. exciv, fig. 4. (Spotted Eagle Ray.)

## MYLIOBATIS, Dum. 1817.

45. M. AUSTRALIS, Macl. P.L.S. N.S.W. vi, 1881, p. 380. McCoy,  
Prod. Z. Vict. dec. vii, pl. 63. (Eagle Ray.)

## Family MOBULIDÆ.

## MANTA, Bancroft, 1828.

46. M. ALFREDI, Krefft. P.L.S. N.S.W. vi, 1881, p. 381.  
Undescribed. (Prince Alfred's Ray.)

## Sub-Class. HOLOCEPHALI (Ghost Sharks).

## Chimæroidei.

## Family CHIMÆRIDÆ.

## CHIMÆRA, Linn. 1758.

47. C. OGILBYI, Waite, Mem. Aust. Mus. iv, 1899, p. 48, pl. vi.  
(Ghost Shark.)

**Sub-Class. TELEOSTOMI (True Fishes).**

**Malacopterygii.**

**Family ELOPIDÆ.**

MEGALOPS, Lacép. 1803.

48. M. CYPRINOIDES, Brouss. Ichthy. 1782, pl. ix. Bleek. Atl. Ichth. vi, pl. cclxx, fig. 4. (Big-eyed Herring.)

ELOPS, Linn. 1766.

49. E. SAURUS, Linn. Syst. Nat. ed. xii, 1766, p. 518. Bleek. Atl. Ichth. vi, pl. cclviii, fig. 3. (Giant Herring.)

**Family CHIROCENTRIDÆ.**

CHIROCENTRUS, Cuv. 1817.

50. C. DORAB, Forsk. Descr. Anim. 1775, p. 72. Bleek. Atl. Ichth. vi, pl. cclxxi, fig. 3.

**Family CLUPEIDÆ.**

CHANOS, Lacép. 1803.

51. C. CHANOS, Forsk. Descr. Anim. 1775, p. 74. Bleek. Atl. Ichth. vi, pl. cclxxii, fig. 4. (Salmon Herring.)

DOROSOMA, Rafin. 1820.

52. D. EREBI, Günth. Cat. Fish. vii, 1868, p. 407. Rich. Voy. Ereb. and Terr., pl. xxxviii, fig. 7-10. (Bony Bream.)

ETRUMEUS, Bleek. 1853.

53. E. JACKSONIENSIS, MacL. P.L.S. N.S.W. iii, 1878, p. 36, pl. iv, fig. 1. (Maray.)

STOLEPHORUS, Lacép. 1803.

54. S. ROBUSTUS, Ogil. P.L.S. N.S.W. xxii, 1897, p. 64. (Tailor Maray.)

## CLUPANODON, Lacép. 1803.

55. *C. NEOPILCHARDUS*, Steind., Denk. K. Akad. Wiss. Wien. xli, 1879, p. 12. Ogil. Edib. Fish. N.S.W., pl. xlv. (Pilchard.)

## SARDINELLA, Cuv. and Val. 1847.

56. *S. CASTLENAUI*, Ogil. P.L.S. N.S.W. xxii, 1897, p. 66. (Herring.)

## POTAMALOSA, Ogil. 1897.

57. *P. NOVÆ HOLLANDIÆ*, Cuv. and Val. Hist. Nat. Poiss. xx, 1847, p. 376. (River Herring.)

## HYPERLOPHUS, Ogil. 1892.

58. *H. SPRATTELLIDES*, Ogil. Rec. Aust. Mus. ii, 1892, p. 24. (Sandy Sprat.)

59. *H. COPII*, Ogil. P.L.S. N.S.W. xxii, 1897, p. 72. (Silver Sprat.)

## ENGRAULIS, Cuv. 1817.

60. *E. ANTIPODUM*, Günth. Cat. Fish. vii, 1868, p. 386. (Anchovy.)

## Family SALMONIDÆ.

## RETROPINNA, Gill. 1862.

61. *R. RETROPINNA*, Rich. Voy. Ereb. and Terr. 1848, p. 121, pl. lii, fig. 1-3. (Smelt.)

## Family GONORHYNCHIDÆ.

## GONORHYNCHUS, Cuv. 1817.

62. *G. GONORYNCHUS*, Linn. Syst. Nat. ed. xii, 1766, p. 528. Rich. Voy. Ereb. and Terr. pl. xxix, fig. 1-6. (Sand Fish.)

### Ostariophysi.

#### Family SILURIDÆ.

PLOTOSUS, Lacép. 1803.

63. P. ANGUILLARIS, Bloch, Ichty. xi, 1794, pl. ccclxxiii, fig. 1.  
Bleek. Atl. Ichth. ii, pl. xcv, fig. 2. (Striped Cat Fish.)

COPIDOGLANIS, Günth. 1864.

64. C. TANDANUS, Mitch. Exp. Int. Aust. i, 1838, p. 95, pl. v,  
fig. 2. (Fresh-water Cat Fish.)

65. C. OBSCURUS, Günth. Cat. Fish. v, 1864, p. 26. (Dusky  
Cat Fish.)

CNIDOGLANIS, Günth, 1864.

66. C. MEGASTOMUS, Rich. Voy. Ereb. and Terr. 1845, p. 31, pl.  
xxi, fig. 1-3. (Estuary Cat Fish.)

67. C. LEPTURUS, Günth. Cat. Fish. v, 1864, p. 28. (Long-tailed  
Cat Fish.)

GALEICHTHYS, Cuv. and Val. 1840.

68. G. AUSTRALIS, Günth. P.Z.S. 1867, p. 103, fig. (head). (Small  
Sea Cat Fish.)

69. G. THALASSINUS, Rüpp. N.W., Fische, 1828, p. 75, pl. xx,  
fig. 2. (Large Sea Cat Fish.)

### Symbranchii.

#### Family SYMBRANCHIDÆ.

CHEILOBRANCHUS, Rich. 1845.

70. C. RUFUS, Macl. P.L.S. N.S.W. vi, 1881, p. 266. (Red-  
banded Shore Eel.)

**Apodes.****Family ANGUILLIDÆ.**

ANGUILLA, Shaw, 1804.

71. A. BENGALENSIS, Gray, Ill. Ind. Zool. i, 1830, pl. xii, fig. 5, Day, Fish. India, pl. clxviii, fig. 1. (Long-finned Eel.)
72. A. AUSTRALIS, Rich. P.Z.S. 1841, p. 22, and Voy. Ereb. and Terr. pl. xlvi, fig. 1-6. (Short-finned Eel.)

**Family LEPTOCEPHALIDÆ.**

LEPTOCEPHALUS, Gmel. 1789.

73. L. LABIATUS, Cast. P.L.S. N.S.W. iii, 1879, p. 396. (Conger Eel.)
- CONGERMURÆNA, Kaup, 1856.
74. C. HABENATA, Rich. Voy. Ereb. and Terr. 1848, p. 109, pl. 1, fig. 1-5. (Little Conger Eel.)

ATOPICHTHYS, Garman, 1899.

75. A. SP. Waite, P.L.S. N.S.W. (2), ix, 1894, p. 225. Ogil. P.L.S. N.S.W. xxii, 1897, p. 158, fig. (head). (Larval Fishes.)

**Family MURÆNIDÆ.**

MURÆNESOX, McClell. 1843.

76. M. CINEREUS, Forsk. Descr. Anim. 1775, p. 22. Day, Fish. India, pl. clxviii, fig. 4. (Silver Eel.)

MYROPHIS, Lütk. 1851.

77. M. AUSTRALIS, Cast. P.L.S. N.S.W. iii, 1879, p. 396. (Worm Eel.)

MURÆNICHTHYS, Bleek. 1853.

78. M. GYMNOTUS, Bleek. Act. Soc. Sci. Ind. Neder. ii, 1857. p. 90, and Atl. Ichth. iv, pl. cl, fig. 3.
79. M. AUSTRALIS, Macl. P.L.S. N.S.W. vi, 1881, p. 272.

## OPHISURUS, Lacép. 1800.

80. O. SERPENS, Linn. Syst. Nat. ed. x, 1758, p. 244. Temm. and Schl. Faun. Japon. pl. cxv, fig. 1. (Snake Eel.)

## BASCANICHTHYS, Jord. and Davis, 1892.

81. B. PINGUIS, Günth. Cruise Curaçoa, 1873, p. 430, pl. xxxv.

## GYMNOTHORAX, Bloch, 1795.

82. G. CINERASCENS, Rüpp. Atl. Reise nörd. Afrika, Fische, 1828, p. 120. Rich. Voy. Ereb. and Terr. pl. xlvi, fig. 1-5.
83. G. PRASINA, Rich. Voy. Ereb. and Terr. 1847, p. 93. Bleek. Atl. Ichth. iv, pl. exci, fig. 2. (Green Eel.)
84. G. PICTA, Ahl. Muræn. et Ophich. in Thunb. Dissert. iii, 1789, p. 6, pl. ii, fig. 2. Bleek. Atl. Ichth. iv, pl. clxx, fig. 3-4. (Painted Eel.)
85. G. PRIONODON, Ogil. P.L.S. N.S.W. (2), ix, 1895, p. 720.

## ECHIDNA, Forst. 1778.

86. E. NEBULOSA, Ahl. Muræn. et Ophich. in Thunb. Dissert iii, 1789, p. 5, pl. 1, fig. 2. Bleek. Atl. Ichth. iv, pl. clxviii, fig. 2. (Clouded Eel.)

**Haplomi.****Family GALAXIIDÆ.**

## GALAXIAS, Cuv. 1817.

87. G. SCRIBA, Cuv. and Val. Hist. Nat. Poiss. xviii, 1846, p. 347.
88. G. KREFFTII, Günth. Cat. Fish. vi, 1866, p. 211.
89. G. PUNCTATUS, Günth. Cat. Fish. vi, 1866, p. 212.
90. G. COXII, MacL. P.L.S. N.S.W. v, 1880, p. 45. (Mountain Trout.)

91. *G. PLANICEPS*, MacL. P.L.S. N.S.W. vi, 1881, p. 233.  
 92. *G. BONGBONG*, MacL. P.L.S. N.S.W. vi, 1881, p. 233.  
 93. *G. FINDLAYI*, MacL. P.L.S. N.S.W. vii, 1882, p. 107.

### Family APLOCHITONIDÆ.

*PROTOTROCTES*, Günth. 1864.

94. *P. MARÆNA*, Günth. Cat. Fish. v, 1864, p. 382. Waite, Rec. Aust. Mus. iv, pl. xli. (Grayling.)

### Family MYCTOPHIDÆ.

*TRACHINOCEPHALUS*, Gill, 1851.

95. *T. MYOPS*, Forst. in Bl. Schn. Syst. Ichth. 1801, p. 421. Bleek. Atl. Ichth. vi, pl. cclxxviii, fig. 3.

*SAURIDA*, Cuv. and Val. 1849.

96. *S. TUMBIL*, Bloch, Ichty. xii, 1795, p. 100, pl. cccxxx.

97. *S. NEBULOSA*, Cuv. and Val. Hist. Nat. Poiss. xxii, 1849, p. 506. Bleek. Atl. Ichth. vi, pl. cclxxvii, fig. 1.

*AULOPOS*, Cuv. 1817.

98. *A. PURPURISSATUS*, Rich. Icon. Pisc. 1843, p. vi, pl. ii, fig. 3. McCoy, Prod. Z. Vict. dec. vi, pl. liv and lv. (Sergeant Baker.)

*CHLOROPHTHALMUS*, Bonap. 1840.

99. *C. NIGRIPINNIS*, Günth. A. M. N. H. (5), ii, 1878, p. 182. Voy. Chall. xxii, pl. li, fig. A. (Cucumber Fish.)

### Family ALEPISAURIDÆ.

*ALEPISAURUS*, Lowe, 1833.

100. *A. FEROX*, Lowe, P.Z.S. 1883, p. 104, and T.Z.S. i, pl. xix,lix.

**Cateostomi.****Family FISTULARIIDÆ.**

FISTULARIA, Linn. 1758.

101. *F. PETIMBA*, Lacép. Hist. Nat. Poiss. v, 1803, p. 349. Günth.  
Voy. Chall. i, pl. xxxii, fig. C (Snout).
102. *F. DEPRESSA*, Günth. Voy. Chall. i, 1880, p. 69, pl. xxxii,  
fig. D (Snout). (Flute Mouth.)

**Family CENTRICIDÆ.**

MACRORHAMPHOSUS, Lacép. 1803.

103. *M. SCOLOPAX*, Linn. Syst. Nat. ed. xii, 1766, p. 415. Waite,  
Mem. Aust. Mus. iv, pl. vii, fig. i. (Bellows Fish).
104. *M. GRACILIS*, Lowe, P.Z.S. 1839, p. 86. Waite, Mem. Aust.  
Mus. iv, pl. vii, fig. 2. (Little Bellows Fish.)

**Family SYNGNATHIDÆ.**

SYNGNATHUS, Linn. 1758.

105. *S. MARGARITIFER*, Peters, MB. Ak. Wiss. Berlin, 1868, p. 457.
106. *S. TIGRIS*, Cast. P.L.S. N.S.W. iii, 1879, p. 397.
107. *S. SUPERCILIARIS*, Günth. Voy. Chall. i, 1880, p. 30.
108. *S. PARVICEPS*, Rams. and Ogil. P.L.S. N.S.W. (2), i, 1886,  
p. 475.
109. *S. ALTIROSTRIS*, Ogil. Rec. Aust. Mus. i, 1890, p. 55.

ICHTHYOCAMPUS, Kaup, 1853.

110. *I. CINCTUS*, Rams. P.L.S. N.S.W. vii, 1882, p. 111.

## NANNOCAMPUS, Günth. 1870.

111. N. RUBER, Rams. and Ogil. P.L.S. N.S.W. x, 1886, p. 757.

## UROCAMPUS, Günth. 1870.

112. U. CARINIROSTRIS, Cast. P.Z.S. Vict. i, 1872, p. 200.

## STIGMATOPORA, Kaup, 1853.

113. S. ARGUS, Rich. P.Z.S. 1840, p. 29, and T.Z.S. iii, pl. vii, fig. 2.

114. S. NIGRA, Kaup, Lophob. 1856, p. 53.

## GASTEROTOKEUS, Kaup, 1853.

115. G. BIACULEATUS, Bloch, Ichty. iv, 1785, pl. exxi, fig. 1-2.

## SOLEGNATHUS, Swains. 1839.

116. S. HARDWICKII, Gray, Illus. Indian Zool. 1830, pl. vi, fig. 3.

117. S. SPINOSISSIMUS, Günth. Cat. Fish. viii, 1870, p. 195. Waite, P.L.S. N.S.W. (2), ix, pl. xvii, fig. 5-8. (Spiny Sea-horse.)

118. S. FASCIATUS, Günth. Voy. Chall. i, 1880, p. 30, pl. xiv, fig. B.

## PHYLLOPTERYX, Swains. 1839.

119. P. FOLIATUS, Shaw, Gen. Zool. v, 1804, p. 456, pl. clxxx. (Leafy Sea-horse.)

## HIPPOCAMPUS, Rafin. 1810.

120. H. NOVÆ-HOLLANDÆ, Steind. SB. Ak. Wiss. Wein, liii, 1866, p. 474, pl. i, fig. 2. (Common Sea-horse.)

121. H. BREVICEPS, Peters, MB. Ak. Wiss. Berlin, 1869, p. 710. (Short-snouted Sea-horse.)

## Family PEGASIDÆ.

PÉGASUS, Linn. 1758.

122. *P. DRACONIS*, Linn. Syst. Nat. ed. xii, 1766, p. 418. Day, Fish. India, pl. lxi, fig. 1.

## Percesoces.

### Family SCOMBRESOCIDÆ.

TYLOSURUS, Cocco, 1829.

123. *T. FEROX*, Günth. Cat. Fish. vi, 1866, p. 242. Woods, Fish. N.S.W. pl. xxxvi. (Slender Long Tom.)
124. *T. MACLEAYANA*, Ogil. Cat. Fish. N.S.W. 1886, p. 53, and Edib. Fish. N.S.W. pl. xli. (Stout Long Tom.)
125. *T. KREFFTII*, Günth. Cat. Fish. vi, 1866, p. 250.

HYPORHAMPHUS, Gill, 1859.

126. *H. INTERMEDIUS*, Cant. A. M. N. H. ix, 1842, p. 485. McCoy, Prod. Z. Vict. dec. xiv, pl. 135, fig. 1. (Sea Garfish.)
127. *H. REGULARIS*, Günth. Cat. Fish. vi, 1866, p. 261. Woods, Fish. N.S.W. pl. xxxvii, xxxviii. (River Garfish.)
128. *H. AUSTRALIS*, Steind. SB. Akad. Wiss. Wien, liii, 1866, p. 471.

HEMIRAMPHUS, Cuv. 1817.

129. *H. FAR*, Forsk. Deser. Anim. 1775, p. 67. Day, Fish. India, pl. cxx, fig. 3.

ARRHAMPHUS, Günth. 1866.

130. *A. SCLEROLEPIS*, Günth. Cat. Fish. vi, 1866, p. 277. Ogil. Edib. Fish. N.S.W. pl. xliv. (Short-beaked Garfish.)

## Family SCOMBRESOCIDÆ.

### SCOMBRESOX, Lacép. 1803.

131. *S. FORSTERI*, Cuv. and Val. Hist. Nat. Poiss. xviii, 1846, p. 481. McCoy, Prod. Z. Vict. dec. xiv, pl. 135, fig. 2. (Bill-fish.)

### EXOCETUS, Linn. 1758.

132. *E. EVOLANS*, Linn. Syst. Nat. ed. xii, 1766, p. 521. Day, Fish. India, pl. cxx, fig. 5. (Flying Fish.)

### CYPSILURUS, Swains. 1839.

133. *C. MELANOCERCUS*, Ogil. P.L.S. N.S.W. x, 1885, p. 123.

## Family AATHERINIDÆ.

### ATHERINA, Linn. 1758.

134. *A. LACUNOSA*, Bl. Schn. Syst. Ichth. 1801, p. 112. Günth. Fische Südsee, pl. cxviii, fig. E. (Hardyhead.)

### CHIROSTOMA, Swains. 1839.

135. *C. JACKSONIANA*, Quoy. and Gaim. Voy. Uranie, 1825, p. 333.

136. *C. DUBOULAYI*, Cast. P.L.S. N.S.W. iii, 1878, p. 143.

### ISO, Jord. and Starks, 1901.

137. *I. RHOThOPHILUS*, Ogil. P.L.S. N.S.W. (2), x, 1895, p. 323. Waite, Rec. Aust. Mus. v, pl. xxv, fig. 2. (Surf-fish.)

### PSEUDOMUGIL, Kner, 1867.

138. *P. SIGNIFER*, Kner, Reise Novara, 1867, p. 275, pl. xiii, fig. 5, A.B. (Blue-eye.)

## RHOMBATRACTUS, Gill, 1894.

139. R. FLUVIATILIS, Cast. P.L.S. N.S.W. iii, 1878, p. 141.  
 140. R. LINEATUS, Macl. P.L.S. N.S.W. v, 1881, p. 626.

## MELANOTÆNIA, Gill, 1862.

141. M. NIGRANS, Rich. A. M. N. H. xi, 1843, p. 180. Kner and Steind. SB. Akad. Wiss. Wien, liv, pl. iii, fig. 10.

## Family MUGILIDÆ.

## MUGIL, Linn. 1758.

142. M. DOBULA, Günth. Cat. Fish. iii, 1861, p. 420, and Fische Südsee, pl. cxx, fig. A. (Sea Mullet.)  
 143. M. ARGENTEUS, Quoy and Gaim. Voy. Uranie, 1825, p. 338, pl. lix, fig. 3.  
 144. M. PARVICEPS, nom. nov. M. BREVICEPS (preocc.), Steind. SB. Akad. Wiss. Wien, liii, 1866, p. 459, pl. i, fig. 1.  
 145. M. CUNNESIUS, Cuv. and Val. Hist. Nat. Poiss. xi, 1836, p. 114. Day, Fish. India, pl. lxxiv, fig. 3.  
 146. M. AUSTRALIS, Steind. Denk. K. Akad. Wiss. Wien, xli, 1879, p. 6.  
 147. M. COMPRESSUS, Günth. Cat. Fish. iii, 1861, p. 451, and Fische Südsee, pl. cxxiii, fig. A.  
 148. M. PETARDI, Cast. Research. Fish. Aust. 1875, p. 32. (Richmond Mullet.)  
 149. M. GEORGII, Ogil. P.L.S. N.S.W. xxii, 1897, p. 77. (George's River Mullet.)  
 150. M. HYSELOSOMA, Ogil. P.L.S. N.S.W. xxii, 1897, p. 74.  
 151. M. PERONII, Cuv. and Val. Hist. Nat. Poiss. xi, 1836, p. 138. Ogil. Edib. Fish. N.S.W. pl. xxxii. (Flat-tailed Mullet.)  
 TRACHYSTOMA, Ogil. 1887.  
 152. T. MULTIDENS, Ogil. P.Z.S. 1887, p. 614. (River Mullet.)

**MYXUS**, Günth. 1861.

153. *M. ELONGATUS*, Günth. Cat. Fish. iii, 1861, p. 466. Waite,  
"Thetis," Prelim. Rep. pl. xii. (Tallegalane.)

**AGONOSTOMUS**, Benn. 1830.

154. *A. FORSTERI*, Cuv. and Val. Hist. Nat. Poiss. xi, 1836, p.  
141. Rich. Voy. Ereb. and Terr. pl. xxvi, fig. 1-4. (Lake  
Mullet.)

**Family POLYNEMIDÆ.****POLYDACTYLUS**, Lacép. 1803.

155. *P. INDICUS*, Shaw, Gen. Zool. v, 1804, p. 155. McClell. Calc.  
J. N. H. iii, pl. vi. (Threadfin.)

156. *P. MACROCHIR*, Günth. A. M. N. H. (3), xx, 1867, p. 60.

**Family SPHYRÆNIDÆ.****SPHYRÆNA**, Bl. Schn. 1801.

157. *S. NOVÆ-HOLLANDÆ*, Günth. Cat. Fish. ii, 1860, p. 335.  
Ogil. Edib. Fish, N.S.W. pl. xxx. (Short-finned Pike.)

158. *S. OBTUSATA*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p.  
350. Günth. Fische Südsee, pl. cxix, fig. B. (Australian  
Pike.)

**Family TETRAGONURIDÆ.****TETRAGONURUS**, Risso, 1810.

159. *T. CUVIERI*, Risso, Ichth. Nice, 1810, p. 347. Lowe, Fish.  
Madeira, pl. xix. (Square Tail.)

## Family STROMATEIDÆ.

NOMEUS, Cuv. 1817.

160. *N. GRONOVII*, Gmel. Syst. Nat. ed. xiii, 1789, p. 1205.  
Valenc. Reg. Anim. Ill. Poiss. pl. lvi, fig. 2. (Portuguese  
Man-of-War Fish.)

PSENES, Cuv. and Val. 1833.

161. *P. CYANOPHRYNS*, Cuv. and Val. Hist. Nat. Poiss. ix, 1833,  
p. 260.
162. *P. WHITELEGGII*, Waite, P.L.S. N.S.W. (2), ix, 1894, p. 218,  
pl. xvii, fig. 1.

SERIOLELLA, Guichen. 1847.

163. *S. BRAMA*, Günth. Cat. Fish. ii, 1860, p. 390.

SCHEZOCEPHALUS, Cocco, 1834.

164. *S. MACULATUS*, Günth. Cat. Fish. ii, 1860, p. 412. Waite,  
Rec. Aust. Mus. v, pl. xx, fig. 1. (Raft Fish.)
165. *S. POROSUS*, Rich. Voy. Ereb. and Terr. 1845, p. 26, pl. xvi,  
fig. 5-6.

## Anacanthini.

### Family GADIDÆ.

LOTELLA, Kaup, 1858.

166. *L. CALLARIAS*, Günth. A.M.N.H. (3), xi, 1863, p. 116.  
McCoy, Prod. Z. Vict. dec. ii, pl. 19. (Beardie.)
167. *L. FULIGINOSA*, Günth. Cat. Fish. iv, 1862, p. 347.

PHYSICULUS, Kaup, 1858.

168. *P. BARBATUS*, Günth. A.M.N.H. (3), xi, 1863, p. 116.  
McCoy, Prod. Z. Vict. dec. ii, pl. 20. (Victorian Rock Cod.)
169. *P. BACHUS*, Forst. in Bl. Schn. Syst. Ichth. 1801, p. 53.  
Rich. Voy. Ereb. and Terr. pl xxxviii, fig. 1-2. (Red Cod.)

AUSTROPHYCIS, Ogil. 1897.

170. *A. MEGALOPS*, Ogil. P.L.S. N.S.W. xxii, 1897, p. 91.

## **Acanthopterygii Perciformes.**

### **Family BERYCIDÆ.**

**BERYX**, Cuv. 1829.

171. **B. AFFINIS**, Günth. Cat. Fish. i, 1859, p. 13. Woods, Fish. N.S.W. pl. xv. (Nannygai.)

### **Family TRACHICHTHYIIDÆ.**

**TRACHICHTHYS**, Shaw and Nodd. 1799.

172. **T. AUSTRALIS**, Shaw and Nodd. Nat. Misc. x, 1799, pl. ccclxxviii. McCoy, Prod. Z. Vict. dec. xii, pl. 114. (Roughy.)
173. **T. ELONGATUS**, Günth. Cat. Fish. i, 1859, p. 10, and Voy. Chall. xxii, pl. v, fig. C. (Long Roughy.)

**PARATRACHICHTHYS**, Waite, 1899.

174. **P. TRAILLI**, Hutton, T. N. Z. I. viii, 1876, p. 212. Günth. Voy. Chall. xxii, pl. lv, fig. A.

### **Family MONOCENTRIDÆ.**

**MONOCENTRIS**, Bl. Schn. 1801.

175. **M. GLORIA MARIS**, De Vis, P.L.S. N.S.W. vii, 1882, p. 368. Waite, Mem. Aust. Mus. iv, pl. viii, fig. 1-2 (head.) (Knight-Fish.)

### **Family PEMPHERIDÆ.**

**PEMPHERIS**, Cuv. 1829.

176. **P. COMPRESSUS**, Shaw, in White's Voy. N.S.W. 1790, p. 267, fig. 2. (Bullseye.)
177. **P. MACROLEPIS**, Macl. P.L.S. N.S.W. v, 1881, p. 516. Waite, Mem. Aust. Mus. iv, pl. x. (Big-scaled Bullseye.)

### **Family CENTRARCHIDÆ.**

**KUHLIA**, Gill, 1861.

178. **K. TÆNIURA**, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p. 114. Günth. Fische Südsee, pl. xix, fig. C. (Flagtail.)

## Family KYPHOSIDÆ.

GIRELLA, Gray, 1835.

179. *G. TRICUSPIDATA*, Quoy and Gaim. Voy. Uranie, 1824, p. 296. Rich. Voy. Ereb. and Terr. pl. xxv, fig. 2. (Blackfish.)
180. *G. CYANEA*, Macl. P.L.S. N.S.W. v, 1881, p. 409. Waite, Rec. Aust. Mus. v, pl. xx, fig. 3. (Blue Fish.)
181. *G. ELEVATA*, Macl. P.L.S. N.S.W. v, 1881, p. 408.
182. *G. SIMPLEX*, Rich. Voy. Ereb. and Terr. 1848, p. 120. McCoy, Prod. Z. Vict. dec. viii, pl. 73. (Ludrick.)

KYPHOSUS, Lacép. 1802.

183. *K. SYDNEYANUS*, Günth. A. M. N. H. (5), xviii, 1886, p. 368. Ogil. Edib. Fish. N.S.W. pl. xvi. (Drummer.)

TEPHRÆOPS, Günth. 1859.

184. *T. ZEBRA*, Rich. Voy. Ereb. and Terr. 1846, p. 70. Steind. SB. Akad. Wiss. Wien, liii, pl. vi, fig. 2.

## Family LOBOTIDÆ.

LOBOTES, Cuv. 1829.

185. *L. SURINAMENSIS*, Bloch, Ichty. vii, 1790, pl. ccxlili. Bleek. Atl. Ichth. vii, pl. ccxi, fig. 4. (Triple-tail.)

## Family SERRANIDÆ.

PERCALATES, Rams. and Ogil. 1887.

186. *P. COLONORUM*, Günth. A. M. N. H. (3), xi, 1863, p. 114. McCoy, Prod. Z. Vict. dec. ii, pl. xiv. (Australian Perch.)

PLECTROPLITES, Gill, 1863.

187. *P. AMBIGUUS*, Rich. Voy. Ereb. and Terr. 1845, p. 25, pl. xix. McCoy, Prod. Z. Vict. dec. ix, pl. 84. (Golden Perch.)

## MACQUARIA, Cuv. and Val. 1830.

188. M. AUSTRALASICA, Cuv. and Val. Hist. Nat. Poiss. v, 1830, p. 377, pl. cxxxii. (Macquarie's Perch.)

## OLIGORUS, Günth. 1859.

189. O. MACQUARIENSIS, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p. 58. McCoy, Prod. Z. Vict. dec. ix, pl. 85 and 86. (Murray Cod.)

## ACANTHISTIUS, Gill, 1862.

190. A. SERRATUS, Cuv. and Val. Hist. Nat. Poiss. ii, 1828, p. 399. Günth. Cruise Curaçoa, pl. xxix. (Wirrah.)

## EPINEPHELUS, Bloch, 1793.

191. E. DÆMELII, Günth. A. M. N. H. (4), xvii, 1876, p. 391. Boul. Cat. Fish. i, pl. vii. (Black Rock Cod.)

192. E. UNDULATOSTRIATUS, Peters, MB. Akad. Wiss. Berlin, 1866, p. 518. Macl. P.L.S. N.S.W. iii, pl. ii. (Wavy Rock Cod.)

193. E. SEPTEMFASCIATUS, Thunb. Vetensk. Acad. Handl. Stockholm, xiv, 1793, p. 56, pl. i. Temm. and Schleg. Fauna Japon. pl. iv, fig. 1. (Grey-banded Rock Cod.)

194. E. MERRA, Bloch, Ichth. x, 1793, p. 17, pl. cccxxix. Günth. Fische Südsee, pl. vii.

195. E. FUSCOGUTTATUS, Forsk. Descr. Anim. 1775, p. 42. Bleek. Atl. Ichth. vii, pl. cccvii, fig. 3.

## PROMICROPS, Gill, 1868.

196. P. ITAIARA, Lichten. Abh. Ak. Berlin, 1820-1, p. 279. Rams. P.L.S. N.S.W. v, pl. ix. (Queensland Cod.)

## HYPOPLECTRODES, Gill, 1862.

197. H. SEMICINCTUS, Cuv. and Val. Hist. Nat. Poiss. ix, 1833, p. 442. Hector, T. N. Z. I. vii, pl. x, fig. 1. (Half-banded Sea Perch.)

198. *H. ANNULATUS*, Günth. Cat. Fish. i, 1859, p. 158, and Cruise Curaçoa, pl. xxviii, fig. B. (Banded Sea Perch.)
199. *H. NIGRORUBRUM*, Cuv. and Val. Hist. Nat. Poiss. ii, 1828, p. 402. Quoy and Gaim. Voy. Astrolabe, pl. 4, fig. 1.

CÆSIOPERCA, Cast. 1872.

200. *C. LEPIDOPTERA*, Forst. in Bl. and Schn. Syst. Ichth. 1801, p. 302. Waite, Thetis Prelim. Rep. pl. i. (Bastard Longfin.)

CAPRODON, Temm. and Schl. 1844.

201. *C. LONGIMANUS*, Günth. Cat. Fish. i, 1859, p. 94. Boul. Cat. Fish. (2), i, pl. xii. (Longfin.)

ANTHIAS, Bloch, 1792.

202. *A. PULCHELLUS*, Waite, Mem. Aust. Mus. iv, 1899, p. 77, pl. xii.

CALLANTHIAS, Lowe, 1839.

203. *C. PLATEI*, Steind. Zool. Jahrb. Supp. iv, 2, 1898, p. 284, pl. xv.

PARAPLESIOPS, Bleek. 1875.

204. *P. BLEEKERI*, Günth. Cat. Fish. iii, 1861, p. 364, and Fische Südsee, pl. lviii, fig. A. (Roundhead.)

TRACHINOPS, Günth. 1861.

205. *T. TÆNIATUS*, Günth. Cat. Fish. iii, 1861, p. 366. Knér, Reise Novara, p. 215, pl. viii, fig. 7.

PRIACANTHUS, Cuv. 1817.

206. *P. MACRACANTHUS*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p. 108. Temm. and Schleg. Fauna Japon. pl. vii, fig. 1. (Red Bullseye.)

GENYOROGE, Cant. 1850.

207. *G. BENGALENSIS*, Bloch, Ichty. vii, 1790, p. 82, pl. cxcvi, fig. 2. Day, Fish. India, pl. x, fig. 4.

208. *G. FULVIFLAMMA*, Forsk. Descr. Anim. 1775, p. 45. Day, Fish. India, pl. xii, fig. 6. (Black-spotted Sea Perch.)
209. *G. MACLEAYANUS*, Rams. P.L.S. N.S.W. viii, 1883, p. 178.

**LUTIANUS**, Bloch. 1792.

210. *L. JOHNI*, Bloch, Ichty. 1792, p. 97, pl. ccxviii. Day, Fish. India, pl. xiii, fig. 1.

**ETELIS**, Cuv. and Val. 1828.

211. *E. CARBUNCULUS*, Cuv. and Val. Hist. Nat. Poiss. ii, 1828, p. 127.

**GLAUCOSOMA**, Temm. and Schleg. 1843.

212. *G. SCAPULARE*, Rams. P.L.S. N.S.W. v, 1881, p. 334, pl. xiii. (Pearl Perch.)

**ENOPLOSUS**, Lacép. 1802.

213. *E. ARMATUS*, Shaw, in White's Voy. N.S.W. 1790; p. 254, fig. 1. (Old Wife.)

**CHANDA**, Ham. Buch. 1822.

214. *C. GYMOCEPHALA*, Lacép. Hist. Nat. Poiss. iv., 1802, p. 216. Bleek. Atl. Ichth. viii, pl. ccclii, fig. 3.

215. *C. BURUENSIS*, Bleek. Nat. Tijds. Ned. Ind. xi, 1856, p. 396, and Atl. Ichth. viii, pl. cccliii, fig. 5.

216. *C. AGASSIZII*, Steind. SB. Ak. Wiss. Wien, lv, 1867, p. 9.

217. *C. CASTELNAUI*, Macl. P.L.S. N.S.W. v, 1881, p. 339.

218. *C. RAMSAYI*, Macl. P.L.S. N.S.W. v, 1881, p. 340.

219. *C. JACKSONIENSIS*, Macl. P.L.S. N.S.W. v, 1881, p. 340.

**NANNOPERCA**, Günth. 1861.

220. *N. AUSTRALIS*, Günth. P.Z.S. 1861, p. 116, pl. xix, fig. 2.

221. *N. RIVERINÆ*, Macl. P.L.S. N.S.W. v, 1881, p. 342.

APOGON, Lacép. 1802.

222. A. FASCIATUS, Shaw, in White's Voy. N.S.W. 1790, p. 268, fig. 1. (Soldier Fish.)
223. A. GUNTHERI, Cast. P.Z.S. Vict. i, 1872, p. 46.
224. A. ROSIEGASTER, Rams. and Ogil. P.L.S. N.S.W. (2), i, 1887, p. 1101.

APOGONICHTHYS, Bleek. 1854.

225. A. GILLII, Steind. SB. Akad. Wiss. Wien, lv, 1867, p. 11, pl. i, fig. 1.

APOGONOPS, Ogil. 1896.

226. A. ANOMALUS, Ogil. P.L.S. N.S.W. xxi, 1896, p. 24. Waite, Mem. Aust. Mus. iv, pl. xi, fig. 1.

DINOLESTES, Klunz. 1872.

227. D. LEWINI, Griffith, in Cuv. Anim. King. x, 1834, p. 465, pl. lx. (Long-finned Pike.)

ARRIPIS, Jenyns, 1840.

228. A. TRUTTA, Forst. in Bl. and Schn. Syst. Ichth. 1801, p. 542. McCoy, Prod. Z. Vict. dec. ii, pl. 16-17. (Australian Salmon.)
229. A. GEORGIANUS, Cuv. and Val. Hist. Nat. Poiss. vii, 1831, p. 451. McCoy, Prod. Z. Vict. dec. xix, pl. 184.

CIRRHITICHTHYS, Bleek. 1857.

230. C. APRINUS, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p. 76. Bleek. Atl. Ichth. vii, pl. ccciii, fig. 1.

Family PSEUDOCHROMIDIDÆ.

GNATHYPOPS, Gill, 1860.

231. G. JACKSONIENSIS, Macl. P.L.S. N.S.W. v, 1881, p. 570. Waite. Rec. Aust. Mus. v, pl. xxvi, fig. 2. (Leopard Fish.)

## Family CEPOLIDÆ.

CEPOLA, Linn. 1766.

232. *C. AUSTRALIS*, Ogil. P.L.S. N.S.W. xxiv, 1899, p. 185.  
 (Band Fish.)

## Family SILLAGINIDÆ.

SILLAGO, Cuv. 1817.

233. *S. CILIATA*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p. 415.  
 McCoy, Prod. Z. Vict. dec. xix, pl. 182. (Sand Whiting.)
234. *S. MACULATA*, Quoy and Gaim. Voy. Uranie, 1824, p. 261,  
 pl. liii, fig. 2. (Trumpeter Whiting.)
235. *S. BASSENSIS*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p.  
 412. Quoy and Gaim. Voy. Astrolabe, pl. 1, fig. 2. (Bass  
 Whiting.)
236. *S. PUNCTATUS*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p.  
 413. Quoy and Gaim. Voy. Astrolabe, pl. i, fig. 1. (Spotted  
 Whiting.)

## Family SCIÆNIDÆ.

SCIÆNA, Linn. 1758.

237. *S. ANTARCTICA*, Cast. P.Z.S. Vict. i, 1872. p. 100. Woods,  
 Fish. N.S.W. pl. xvi. (Jewfish.)

CYNOSCIION, Gill, 1862.

238. *C. ATELODUS*, Günth. A. M. N. H. (3), xx, 1867, p. 60.  
 Woods, Fish. N.S.W. pl. xvii. (Teraglin.)

## Family GERRIDÆ.

XYSTÆMA, Jord. and Everm. 1895.

239. *X. OVATUM*, Günth. Cat. Fish. i, 1859, p. 343. Waite, Mem.  
 Aust. Mus. iv, pl. xiii. (Silver Belly.)

## GERRES, Cuv. 1829.

240. *G. ARGYREUS*, Forst. in Bl. Schn. Syst. Ichth. 1801, p. 344.  
 241. *G. SUBFASCIATUS*, Cuv. and Val. Hist. Nat. Poiss. vi, 1830, p. 477.

## Family LATRIDIDÆ.

## LATRIS, Rich. 1840.

242. *L. CILIARIS*, Forst. Descr. Anim. 1844, p. 137. Rich. Voy. Ereb. and Terr. pl. xxvi, fig. 6-7. (Bastard Trumpeter.)  
 243. *L. RAMSAYI*, Ogil. P.L.S. N.S.W. x, 1885, p. 229.

## CHIRONEMUS, Cuv. 1829.

244. *C. MARMORATUS*, Günth. Cat. Fish. ii, 1860, p. 76. Ogil. Edib. Fish. N.S.W. pl. xvii. (Kelp Fish.)

## Family APLODACTYLIDÆ.

## APLODACTYLUS, Cuv. and Val. 1831.

245. *A. LOPHODON*, Günth. Cat. Fish. i, 1859, p. 435. (Rock-Cale.)

## GONIISTIUS, Gill, 1862.

246. *G. GIBBOSUS*, Rich. P.Z.S. 1841, p. 21, and 1850, pl. ii, fig. 3. (Magpie Perch.)

## DACTYLOSPARUS, Gill, 1862.

247. *D. CARPONEMUS*, Cuv. and Val. Hist. Nat. Poiss. v, 1830, p. 362, pl. cxxviii. McCoy, Prod. Z. Vict. dec. xviii, pl. 173-4. (Morwong.)

248. *D. MACROPTERUS*, Forst. in Bl. Schn. Syst. Ichth. 1801, p. 342. Günth. Study of Fishes, fig. 177. (Jackass Fish.)

## CHEILODACTYLUS, Lacép. 1803.

249. *C. FUSCUS*, Cast. P.L.S. N.S.W. iii, 1879, p. 376. Woods, Fish. N.S.W. pl. x-xi. (Carp.)  
 250. *C. NIGRICANS*, Rich. P.Z.S. 1850, p. 63 MacL. P.L.S. N.S.W. viii, 1894, pl. xxii. (Dusky Morwong.)

## Family PRISTIPOMATIDÆ.

TERAPON, Cuv. 1817.

- 251. *T. QUADRILINEATUS*, Bloch, Ichty. vii, 1790, pl. ccxxxviii, fig. 2. Cuv. and Val. Hist. Nat. Poiss. ii, pl. lv. (Trumpeter Perch.)
- 252. *T. ELLIPTICUS*, Rich. Voy. Ereb. and Terr. 1848, p. 118, pl. lii, fig. 4-8. (Silver Perch.)
- 253. *T. UNICOLOR*, Günth. Cat. Fish. i, 1859, p. 277. Kner, SB. Akad. Wiss. Wien, lviii, pl. ii, fig. 4.

POMADASIS, Lacép. 1803.

- 254. *P. HASTA*, Bloch, Ichty. vii, 1790, pl. cxcvi, fig. 1. (Javelin Fish.)

HELOTES, Cuv. 1829.

- 255. *H. SEXLINEATUS*, Quoy and Gaim. Voy. Uranie, 1825, p. 340, pl. lx, fig. 1.

PENTAPUS, Cuv. and Val. 1830.

- 256. *P. SETOSUS*, Cuv. and Val. Hist. Nat. Poiss. vi, 1830, p. 270. Bleek. Atl. Ichth. viii, pl. cccxiv, fig. 1.

APHAREUS, Cuv. and Val. 1830.

- 257. *A. ROSEUS*, Cast. P.L.S. N.S.W. iii, 1879, p. 373.

PENTACEROPSIS, Steind. 1883.

- 258. *P. RECURVIROSTRIS*, Rich. Voy. Ereb. and Terr. 1845, p. 34. Waite, Rec. Aust. Mus. v, pl. vi.

HISTIOPTERUS, Temm. and Schleg. 1844.

- 259. *H. ELEVATUS*, Rams. and Ogil. P.L.S. N.S.W. (2), iii, 1888, p. 1311. Waite, Mem. Aust. Mus. iv, pl. xxvi.
- 260. *H. FARINELLI*, Waite, Mem. Aust. Mus. iv, 1899, p. 116, pl. xxvii.
- 261. *H. LABIOSUS*, Günth. P.Z.S. 1871, p. 658, pl. lix. (Boar Fish.)

### Family SPARIDÆ.

PAGROSOMUS, Gill, 1893.

262. *P. AURATUS*, Forst. in Bl. Schn. Syst. Ichth. 1801, p. 266.  
Woods, Fish. N.S.W. frontispiece. (Schnapper.)

CHRYSORHYS, Cuv. 1829.

263. *C. AUSTRALIS*, Günth. Cat. Fish. i, 1859, p. 494. McCoy,  
Prod. Z. Vict. dec. i, pl. 4. (Black Bream.)
264. *C. SARBA*, Forsk. Descr. Anim. 1775, p. 31. Day, Fish. India,  
pl. xxiv, fig. 6. (Tarwhine.)

LETHRINUS, Cuv. 1829.

265. *L. NEMATACANTHUS*, Bleek. Verh. Bat. Gen. xxvi, 1856, p. 90,  
and Atl. Ichth. viii, pl. cccxxxvii, fig. 3.
266. *L. CHRYSOSTOMUS*, Rich. Voy. Ereb. and Terr. 1848, p. 118,  
pl. lx, fig. 6-7. (Yellow-mouthed Schnapper).
267. *L. OPERCULARIS*, Cuv. and Val. Hist. Nat. Poiss. vi, 1830, p.  
289. Bleek. Atl. Ichth. viii, pl. cccxxxv, fig. 5.
268. *L. GLYPHODON*, Günth. Cat. Fish. i, 1859, p. 462.

### Family MULLIDÆ.

UPENEUS, Cuv. 1829.

269. *U. POROSUS*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p.  
455. Hect. T.N.Z.I. ix, pl. ix, fig. 5. (Red Mullet.)
270. *U. SIGNATUS*, Günth. A.M.N.H. (3), xx, 1867, p. 59. Ogil.  
Edib. Fish. N.S.W. pl. xi. (Spotted Red Mullet.)
271. *U. TRAGULA*, Rich. Ichth. China, 1845, p. 220. Day, Fish.  
India, pl. xxx, fig. 4. (Bar-tailed Mullet.)

## Family SCORPIDIDÆ.

SCORPIS, Cuv. and Val. 1831.

272. *S. EQUIPINNIS*, Rich. Voy. Ereb. and Terr. 1848, p. 121.  
Kner, Reise Novara, pl. v, fig. 3. (Sweep.)

273. *S. VIOLENCEUS*, Hutton, T.N.Z.I. v, 1873, p. 261, pl. viii.

ATYPICHTHYS, Günth. 1862.

274. *A. STRIGATUS*, Günth. Cat. Fish. ii, 1860, p. 64. Steind.  
SB. Ak. Wiss. Wien, liii, pl. iv, fig. 2. (Mado.)

## Family CHÆTODONTIDÆ.

CHELMONOPS, Bleek. 1877.

275. *C. TRUNCATUS*, Kner, SB. Ak. Wiss. Wien, xxxiv, 1859, p. 442, pl. ii.

CHÆTODON, Linn. 1758.

276. *C. SETIFER*, Bloch, Ichty. xii, 1797, p. 99, pl. ccccxxvi, fig. 1.

277. *C. NESOGALLICUS*, Cuv. and Val. Hist. Nat. Poiss. vii, 1831,  
p. 63 = 276 ?

278. *C. OLIGACANTHUS*, Bleek. Verh. Bat. Gen. xxiii, 1850, p. 16.

279. *C. SEXFACIATUS*, Rich. A.M.N.H. x, 1842, p. 26.

280. *C. CITRINELLUS*, Cuv. and Val. Hist. Nat. Poiss. vii, 1831,  
p. 27. Valenc. Reg. Anim. Ill. Poiss. pl. xxxix, fig. 1.

281. *C. STRIGATUS*, Langsd. in Cuv. and Val. Hist. Nat. Poiss.  
vii, 1831, p. 25, pl. clxx.

## Family EPHIPPIDÆ.

EPHIPPUS, Cuv. 1829.

282. *E. MULTIFASCIATUS*, Rich. Voy. Ereb. and Terr. 1846, p. 57, pl. xxxv. fig. 4-6. (Butter-fish.)
283. *E. ARGUS*, Linn. Syst. Nat. ed. xii, 1766, p. 464. Day, Fish. India. pl. xxix, fig. 3. (Spotted Butter-fish.)

PLATAX, Cuv. 1817.

284. *P. TEIRA*, Forsk. Descr. Anim. 1775, p. 60. Bleek. Atl. Ichth. ix, pl. ccclxxix, fig. 2. (Bat-fish.)

MONODACTYLUS, Lacép. 1800.

285. *M. ARGENTEUS*, Linn. Syst. Nat. ed. x, 1758, p. 272. Rich. Voy. Ereb. and Terr. pl. xxxv, fig. 1-3. (Silver Bat-fish.)

## Family ACANTHURIDÆ.

TEUTHIS, Linn. 1766.

286. *T. TRIOSTEGUS*, Linn. Syst. Nat. ed. x, 1758, p. 274. Day, Fish. India, pl. xlvi, fig. 2. (Surgeon Fish.)

PRIONURUS, Lacép. 1827 ?

287. *P. MICROLEPIDOTUS*, Lacép. Ann. Mus. iv, 1827 ?, p. 205, Cuv. and Val. Hist. Nat. Poiss. x, pl. cxcii.

XESURUS, Jord. and Everm. 1896.

288. *X. MACULATUS*, Ogil. P.Z.S. 1887, p. 395.

## Family SIGANIDÆ.

SIGANUS, Forsk. 1775.

289. *S. JAVUS*, Linn. Syst. Nat. ed. xii, 1766, p. 507. Day, Fish. India, pl. xxxix, fig. 5.
290. *S. NEBULOSUS*, Quoy and Gaim. Voy. Uranie, 1825, p. 369. Playf. Fish. Zanz. pl. x, fig. 3. (Black Trevally.)
291. *S. SUTOR*, Cuv. and Val. Hist. Nat. Poiss. x, 1835, p. 148.

## Family POMACENTRIDÆ.

CHROMIS, Cuv. 1815.

292. *C. HYPSCLEPIS*, Günth. A.M.N.H. (3), xx, 1867, p. 66.  
Waite, Mem. Aust. Mus. iv, pl. xiv. (Brown Puller.)

POMACENTRUS, Lacép. 1803.

293. *P. UNIFASCIATUS*, Steind. SB. Ak. Wiss. Wein, lvi, 1867,  
p. 326. Kner, SB. Ak. Wiss. Wein, lviii, pl. viii, fig. 24.
294. *P. DOLII*, MacL. P.L.S. N.S.W. vi, 1881, p. 65, pl. 1, fig. 1.

GLYPHISODON, Lacép. 1803.

295. *G. SAXATILIS*, Linn. Syst. Nat. ed. x, 1758, p. 276. Bleek.  
Atl. Ichth. ix, pl. cccviii, fig. 5.
296. *G. LEUCOZONA*, Bleek. Nat. Tijd. Ned. Ind. xix, 1859, p.  
338, and Atl. Ichth. ix, pl. cccvii, fig. 2.

PARMA, Günth. 1862.

297. *P. MICROLEPIS*, Günth. Cat. Fish. iv, 1862, p. 57.

## Family LABRIDÆ.

HETEROCHEROOPS, Steind. 1866.

298. *H. VIRIDIS*, Steind. SB. Ak. Wiss. Wein, liii, 1866, p. 461,  
pl. v, fig. 3.

TROCHOCOPUS, Günth. 1862.

299. *T. UNICOLOR*, Günth. A.M.N.H. (4), xvii, 1876, p. 398.

HARPE, Gill, 1863.

300. *H. VULPINA*, Rich. P.Z.S. 1850, p. 71. Waite, Rec. Aust.  
Mus. iv, pl. xlvi.

## DIASTODON, Bowd. 1825.

301. *D. UNIMACULATUS*, Günth. Cat. Fish. iv, 1862, p. 109.  
Woods, Fish. N.S.W. pl. xxxii. (Spotted Pig-fish.)
302. *D. BELLIS*, Rams. and Ogil. P.L.S. N.S.W. (2), ii, 1887,  
p. 561. (Banded Pig-fish.)

## CHŒROPS, Rüpp. 1852.

303. *C. OMMOPTERUS*, Rich. Ichth. China, 1846, p. 257. Bleek.  
Atl. Ichth. i, pl. xlvi, fig 3. (Blue-spotted Groper).
304. *C. MACLEAYI*, Rams. and Ogil. P.L.S. N.S.W. (2), ii, 1887,  
p. 241.

## ACHŒRODUS, Gill, 1863.

305. *A. GOULDII*, Rich. A.M.N.H. xi, 1843, p. 353, and P.Z.S.  
pl. iii, fig. 3-4. (Blue Groper.)
306. *A. BADIUS*, Ogil. Edib. Fish. N.S.W. 1893, p. 134. (Red  
Groper.)

## PSEUDOLABRUS, Bleek. 1861.

307. *P. CELIDOTUS*, Forst. Descr. Anim. 1844, p. 133. Rich.  
Voy. Ereb. and Terr. pl. xxxi, fig. 1-5.
308. *P. LUCULENTUS*, Rich. Voy. Ereb. and Terr. 1848, p. 130.  
Waite, Rec. Aust. Mus. v, pl. iv, fig. 1.
309. *P. PARILUS*, Rich. P.Z S. 1850, p. 70.
310. *P. GYMNOGENIS*, Günth. Cat. Fish. iv, 1862, p. 117. (White-  
spotted Parrot-fish.)
311. *P. NIGROMARGINATUS*, Macl. P.L.S. N.S.W. iii, 1878, p. 35.  
pl. iii, fig. 3. (Crimson-banded Parrot-fish.)

312. *P. DORSALIS*, Macl. P.L.S. N.S.W. vi, 1881, p. 87.
313. *P. MELANURUS*, Macl. P.L.S. N.S.W. vi, 1881, p. 89.
314. *P. CYANOGENYS*, Rams. and Ogil. P.L.S. N.S.W. (2), ii, 1887, p. 242.
315. *P. LATICLAVIUS*, Rich. P.Z.S. 1839, p. 99. McCoy, Prod. Z. Vict. dec. xvii, pl. 163.

**EUPETRICHTHYS**, Rams. and Ogil. 1888.

316. *E. ANGUSTIPES*, Rams. and Ogil. P.L.S. N.S.W. (2), ii, 1888, p. 632.

**GUENTHERIA**, Bleek. 1861.

317. *G. TRIMACULATA*, Quoy and Gaim. Voy. Astrolabe, iii, 1835, p. 705.
318. *G. CENTIQUADRA*, Lacép. Hist. Nat. Poiss. iii, 1802, p. 493. Bleek. Atl. Ichth. i, pl. xxxii, fig. 3.

**CORIS**, Lacép. 1802.

319. *C. PICTA*, Bl. Schn. Syst. Ichth. 1801, p. 251. Waite, Rec. Aust. Mus. v, pl. v, fig. 1. (Comb-fish.)
320. *C. REX*, Rams. and Ogil. P.L.S. N.S.W. x, 1886, p. 851. (King Parrot-fish.)

**OPHTHALMOLEPIS**, Bleek. 1861.

321. *O. LINEOLATUS*, Cuv. and Val. Hist. Nat. Poiss. xiii, 1839, p. 436. Kner, Reise Novara, pl. xi, fig. 1. (Rainbow Fish.)

**NOVACULICHTHYS**, Bleek. 1861.

322. *N. JACKSONENSIS*, Rams. P.L.S. N.S.W. vi, 1881, p. 198. Waite, Mem. Aust. Mus. iv, pl. xv. (Keel-headed Parrot-fish.)

## Family ODACIDÆ.

ODAX, Cuv. 1829.

- 323. *O. RICHARDSONII*, Günth. Cat. Fish. iv, 1862, p. 241. Cuv. and Val. Hist. Nat. Poiss. xiv, pl. cccviii. (Rock Whiting.)
- 324. *O. SEMIFASCIATUS*, Cuv. and Val. Hist. Nat. Poiss. xiv, 1839, p. 299, pl. ccccvi. (Rock Whiting.)
- 325. *O. BALTEATUS*, Cuv. and Val. Hist. Nat. Poiss. xiv, 1839, p. 303. (Little Rock Whiting.)

OLISTHOPS, Rich. 1851.

- 326. *O. CYANOMELAS*, Rich. A.M.N.H. (2), vii, 1851, p. 291. Macl. P.L.S. N.S.W., iii, pl. v, fig. 1. (Herring Cale.)

## Family SCARIDÆ.

HETEROSCARUS, Cast. 1872.

- 327. *H. FILAMENTOSUS*, Cast. P.Z.S. Vict. i, 1872, p. 245. Steind. SB. Ak. Wiss. Wein, lxxxviii, pl. iii, fig. 1.

## Acanthopterygii Scombriformes.

### Family CARANGIDÆ.

SCOMBEROIDES, Lacép. 1800.

- 328. *S. SANCTI-PETRI*, Cuv. and Val. Hist. Nat. Poiss. viii, 1831, p. 379, pl. ccxxxvi. (Leather Skin.)

NAUCRATES, Rafin. 1810.

- 329. *N. DUCTOR*, Linn. Syst. Nat. ed. x, 1758, p. 295. Day, Fish India. pl. li A., fig. 2. (Pilot Fish.)

SERIOLA, Cuv. 1829.

- 330. *S. LALANDI*, Cuv. and Val. Hist. Nat. Poiss. ix, 1833, p. 208. McCoy, Prod. Z. Vict. dec. xviii. pl. 172. (King Fish.)
- 331. *S. HIPPOS*, Günth. A.M.N.H. (4), xvii, 1876, p. 392. Waite, Mem. Aust. Mus. iv, pl. ix. (Samson Fish.)

## DECAPTERUS, Bleek. 1855.

332. D. LEPTOSOMUS, Ogil. P.L.S. N.S.W. xxii, 1898, p. 760.  
(Mackerel Scad.)

## TRACHURUS, Rafin. 1810.

333. T. DECLIVIS, Jenyns, Voy. Beagle, iii, 1842, p. 68, pl. xiv.  
McCoy, Prod. Z. Vict. dec. ii, pl. 18. (Yellow-tail.)

## CARANX, Lacép. 1802.

334. C. HIPPOS, Linn. Syst. Nat. ed. xii, 1766, p. 494. Günth.  
Fische Südsee, pl. lxxxiv. (Blue Trevally.)

335. C. GEORGIANUS, Cuv. and Val. Hist. Nat. Poiss. ix, 1833,  
p. 85. Rich. Voy. Ereb. and Terr. pl. lviii, fig. 1-3. (White  
Trevally.).

336. C. NOBILIS, Macl. P.L.S. N.S.W. v, 1881, p. 532.

## ALECTIS, Rafin. 1815.

337. A. CILIARIS, Bloch, Ichty. vi, 1788, p. 29, pl xxix. Günth.  
Fische Südsee, pl. lxxxix. (Pennant Fish.)

## TRACHINOTUS, Lacép. 1802.

338. T. OVATUS, Linn. Syst. Nat. ed. x, 1758, p. 296. Day, Fish.  
India, pl. li B., fig. 2.

339. T. BAILLONII, Lacép. Hist. Nat. Poiss. iii, 1802, p. 93, pl. iii,  
fig. 1. Day, Fish. India, pl. li A., fig. 4. (Dart.)

## Family POMATOMIDÆ.

## POMATOMUS, Lacép. 1802.

340. P. SALTATRIX, Linn. Syst. Nat. ed. x, 1758, p. 293. McCoy,  
Prod. Z. Vict. dec. xix, pl. 183. (Tailor.)

## Family RACHYCENTRIDÆ.

## RACHYCENTRON, Kaup. 1826.

341. R. CANADUM, Linn. Syst. Nat. ed. xii, 1766, p. 491. Day,  
Fish. India, pl. lv, fig. 2. (Black King Fish.)

## Family SCOMBRIDÆ.

### SCOMBER, Linn. 1758.

342. *S. COLIAS*, Gmel. Syst. Nat. ed. xiii. 1789, p. 1329. McCoy, Prod. Z. Vict. dec. iii, pl. 28. (Mackerel.)

### GYMNOSARDA, Gill, 1862.

343. *G. PELAMIS*, Linn. Syst. Nat. ed. x, 1758, p. 297. Günth. Fische Südsee, pl. xcvi. (Bonito.)

344. *G. ALLETERATA*. Rafin. Caratt. Alc. Gen. 1810, p. 46. Günth. Fische Südsee, pl. xcv. (Little Tunny.)

### SARDA, Cuv. 1829.

345. *S. CHILENSIS*, Cuv. and Val. Hist. Nat. Poiss. viii, 1831, p. 163. Day, Fish. India, pl. lvi, fig. 1. (Horse Mackerel.)

### SCOMBEROMORUS, Lacép. 1802.

346. *S. COMMERMONII*, Lacép. Hist. Nat. Poiss. ii, 1800, p. 600, pl. xx, fig. 1. McCoy, Prod. Z. Vict. dec. xvi, pl. 154.

347. *S. GUTTATUS*, Bl. Schn. Syst. Ichth. 1801, p. 23, pl. v.

## Family TRICHIURIDÆ.

### THYRSITES, Cuv. 1829.

348. *T. ATUN*, Euphr. Vetensk. Acad. Nya Handl. xii, 1791, p. 315. Valenc. Reg. Anim. Ill. Poiss. pl. xlxi, fig. 1. (Barracouta.)

### TRICHIURUS, Linn. 1758.

349. *T. COXII*, Rams. and Ogil. P.L.S. N.S.W. (2), ii, 1887, p. 562. (Hair-tail.)

## Family ISTIOPHORIDÆ.

### TETRAPTURUS, Rafin. 1810.

350. *T. INDICUS*, Cuv. and Val. Hist. Nat. Poiss. viii, 1831, p. 286. Day, Fish. India, pl. xlvi, fig. 3. (Sword Fish.)

## Family LUVARIDÆ.

LUVARUS, Rafin. 1810.

351. *L. IMPERIALIS*, Rafin. Caratt. Alc. Gen. 1810, p. 22. Day, Fish. Gt. Brit. and Ireld. i, pl. xlivi.

## Family CORYPHÆNIDÆ.

CORYPHÆNA, Linn. 1758.

352. *C. HIPPURUS*, Linn. Syst. Nat. ed. x, 1758, p. 261. Valenc. Reg. Anim. Ill. Poiss. pl. lxv, fig. 1. (Dolphin.)

## Family BRAMIDÆ.

BRAMA, Bl. and Schn. 1801.

353. *B. RAI*, Bloch, Ichty. viii, 1791, p. 95. McCoy, Prod. Z. Vict. dec. xiv, pl. 133.

## *Acanthopterygii Zeorhombi.*

### Family ZEIDÆ.

ZEUS, Linn. 1758.

354. *Z. AUSTRALIS*, Rich. Voy. Ereb. and Terr. 1845, p. 36, pl. xxv, fig. 1. (John Dory.)

CYTTUS, Günth. 1860.

355. *C. AUSTRALIS*, Rich. T.Z.S. iii, 1849, p. 72, and Voy. Ereb. and Terr. pl. lix, fig. 1-5. (Silver Dory.)

## Family PLEURONECTIDÆ.

PARALICHTHYS, Gir. 1859.

356. *P. ARSIUS*, Ham. Buch. Fish. Ganges, 1822, p. 128. Bleek. Atl. Ichth. vi, pl. ccxxxiii, fig. 2. (Large-toothed Flounder.)

357. *P. NOVÆ CAMBRIÆ*, Ogil. P.L.S. N.S.W. xxiii, 1898, p. 296. (Small-toothed Flounder.)

358. *P. TENUIRASTRUM*, Waite, Mem. Aust. Mus. iv, 1899, p. 121, pl. xxviii.

## PLATOPHRYS, Swains. 1839.

359. P. SPINICEPS, Macl. P.L.S. N.S.W. vi, 1881, p. 127.

## AMMOTRETIS, Günth. 1862.

360. A. ROSTRATUS, Günth. Cat. Fish. iv, 1862, p. 458. Kner,  
Reise Novara, pl. xiii, fig. 4. (Long-snouted Flounder.)

## LOPHONECTES, Günth. 1880.

361. L. GALLUS, Günth. Voy. Chall. i, 1880, p. 29, pl. xv, fig. B.

## LÆOPS, Günth. 1880.

362. L. PARVICEPS, Günth. Voy. Chall. i, 1880, p. 29, pl. xv, fig. A.

## SOLEA, Quensel, 1806.

363. S. MICROCEPHALA, Günth. Cat. Fish. iv, 1862, p. 466.

364. S. LINEATA, Rams. P.L.S. N.S.W. vii, 1883, p. 406.

## ASERAGGODES, Kaup, 1858.

365. A. MACLEAYANA, Rams. P.L.S. N.S.W. v, 1881, p. 462.  
Waite, Mem. Aust. Mus. iv, pl. xxix. (Narrow-banded  
Sole.)

## ACHIRUS, Lacép. 1803.

366. A. PAVONINUS, Lacép. Hist. Nat. Poiss. iv, 1802, p. 658.  
Bleek. Atl. Ichth. vi, pl. ccxli, fig. 1.

## SYNAPTURA, Cant. 1850.

367. S. NIGRA, Macl. P.L.S. N.S.W. v, 1881, p. 49. Waite, Mem.  
Aust. Mus. iv, pl. xxx. (Black Sole.)

368. S. QUAGGA, Kaup, Wieg. Arch. 1858, p. 98.

369. S. FASCIATA, Macl. P.L.S. N.S.W. vii, 1882, p. 14. Waite,  
Mem. Aust. Mus. iv, pl. xxxi. (Many-banded Sole.)

## SYMPHURUS, Rafin. 1810.

370. S. UNICOLOR, Macl. P.L.S. N.S.W. vi, 1881, p. 138. (Lemon  
Sole.)

**Acanthopterygii Gobiiformes.****Family GOBIIDÆ.**

CARASSIOPS, Ogil. 1897.

371. C. COMPRESSUS, Krefft, P.Z.S. 1864, p. 184. Waite, Rec. Aust. Mus. v, pl. xxxiv, fig. 1. (Carp Gudgeon.)
372. C. GALII, Ogil. P.L.S. N.S.W. xxii, 1898, p. 788. Waite, Rec. Aust. Mus. v, pl. xxxiv, fig. 2. (Gale's Carp Gudgeon.)

KREFFTIUS, Ogil. 1897.

373. K. AUSTRALIS, Krefft, P.Z.S. 1864, p. 183. Waite, Rec. Aust. Mus. v, pl. xxxv, fig. 2. (Striped Gudgeon.)
374. K. STRIATUS, Steind. SB. Ak. Wiss. Wien, liii, 1866, p. 452.
375. K. ADSPERSUS, Cast. P.L.S. N.S.W. iii, 1878, p. 142. Waite, Rec. Aust. Mus. v, pl. xxxv, fig. 1. (Purple-striped Gudgeon.)
376. K. COXII, Krefft, P.Z.S. 1864, p. 183. Waite, Rec. Aust. Mus. v, pl. xxxvi, fig. 1. (Cox's Gudgeon.)

MOGURNDA, Gill.

377. M. MOGURNDA, Rich. Voy. Ereb. and Terr., 1844, p. 4, pl. ii, fig. 1-2.

PHILYPNODON, Bleek. 1874.

378. P. GRANDICEPS, Krefft, P.Z.S. 1864, p. 183. Waite, Rec. Aust. Mus. v, pl. xxxvi, fig. 2. (Flat-headed Gudgeon.)

GOBIOMORPHUS, Gill.

379. G. GOBIOIDES, Cuv. and Val. Hist. Nat. Poiss. xii, 1837, p. 247. Rich. Voy. Ereb. and Terr., pl. ii, fig. 5-6. (Bullhead.)

GOBIUS, Linn. 1758.

380. G. ALBOPUNCTATUS, Cuv. and Val. Hist. Nat. Poiss. xii, 1837, p. 57. Günth. Fische Südsee, pl. cx, fig. A.
381. G. BREVIFILIS, Day, P.Z.S. 1867, p. 940.

382. *G. BIFRENATUS*, Kner, Reise Novara, 1865, p. 177, pl. vii, fig. 3. (Bridled Goby.)
383. *G. SEMIFRENATUS*, Macl. P.L.S. N.S.W. v, 1881, p. 598.
384. *G. BUCCATUS*, Cuv. and Val. Hist. Nat. Poiss. xii, 1837, p. 60.
385. *G. FLAVIDUS*, Macl. P.L.S. N.S.W. v, 1881, p. 602.
386. *G. DEPRESSUS*, Rams. and Ogil. P.L.S. N.S.W. (2), i, 1886, p. 4.
387. *G. GOBIOIDES*, Ogil. Cat. Fish. N.S.W. 1886, p. 35.

**GILLICHTHYS**, Cooper, 1864.

388. *G. AUSTRALIS*, Ogil. P.L.S. N.S.W. (2), ix, 1894, p. 367.
- GOBIOIDES, Lacép. 1800.
389. *G. PURPURASCENS*, De Vis, P.L.S. N.S.W. ix, 1884, p. 698.

**Acanthopterygii Discocephali.**

**Family ECHENEIDIDÆ.**

**ECHENEIS**, Linn. 1758.

390. *E. NAUCRATES*, Linn. Syst. Nat. ed. x, 1758, p. 261. Day, Fish. India, 1876, pl. lvii, fig. 1. (Sucking Fish.)

**REMORA**, Gill, 1862.

391. *R. REMORA*, Linn. Syst. Nat. ed. x, 1758, p. 260. Day, Fish. Gt. Brit. and Irel. i, pl. xxxix, fig. 2. (Small Sucking Fish.)

**Acanthopterygii Scleroparei.**

**Family SCORPÆNIDÆ.**

**SEBASTAPISTES**, Streets, 1877.

392. *S. PERCOIDES*, Rich. A.M.N.H. ix, 1842, p. 384, and Voy. Ereb. and Terr. pl. xv. (Red Gurnard Perch.)

## SEBASTOPSIS, Gill, 1862.

393. S. SCABER, Rams. and Ogil. P.L.S. N.S.W. x, 1886, p. 577.

## SEBASTODES, Gill, 1861.

394. S. THETIDIS, Waite, Mem. Aust. Mus. iv, 1899, p. 100, pl. xx.  
(Thetis Fish.)

## SCORPÆNA, Linn. 1758.

395. S. CRUENTA, Rich. A.M.N.H. ix, 1842, p. 217, and Voy. Ereb.  
and Terr. pl. xiv, fig. 1-2. (Spotted Red Rock Cod.)

396. S. CARDINALIS, Rich. A.M.N.H. ix, 1842, p. 212. Woods,  
Fish. N.S.W. pl. xii. (Red Rock Cod.)

397. S. BYNOENSIS, Rich. Voy. Ereb. and Terr. 1845, p. 22, pl. xiv,  
fig. 3-5. (Bynoe's Rock Cod.)

## GLYPTAUCHEN, Günth. 1860.

398. G. PANDURATUS, Rich. P.Z.S. 1850, p. 58, pl. i, fig. 3-4.

## PTEROIS, Cuv. 1817.

399. P. VOLITANS, Linn. Syst. Nat. ed. x, 1758, p. 296. Bleek.  
Atl. Ichth. ix, pl. cccxii, fig. 3. (Red Fire Fish.)

400. P. ZEBRA, Cuv. and Val. Hist. Nat. Poiss. iv, 1829, p. 367.  
Bleek. Atl. Ichth. ix, pl. cccxi, fig. 1. (Fire Fish.)

## NOTESTHES, Ogil. 1903.

401. N. ROBUSTA, Günth. Cat. Fish. ii, 1860, p. 128. Steind. SB.  
Ak. Wiss. Wien, liii, pl. iv, fig. 1. (Bullrout.)

## CENTROPOGON, Günth. 1860.

402. C. AUSTRALIS, Shaw, in White's Voy. N.S.W. 1790, p. 266,  
fig. 1. Waite, Mem. Aust. Mus. iv, pl. xxi. (Fortescue.)

PENTAROGE, Günth. 1860.

403. P. MARMORATA, Cuv. and Val. Hist. Nat. Poiss. iv, 1829, p. 416.

APLOACTIS, Temm. and Schleg. 1843.

404. A. MILESHI, Rich. P.Z.S. 1850, p. 60, pl. 1, fig. 1-2. (Velvet Fish.)

### Family PLATYCEPHALIDÆ.

PLATYCEPHALUS, Bl. Schn. 1801.

405. P. FUSCUS, Cuv. and Val. Hist. Nat. Poiss. iv, 1829, p. 241. Quoy and Gaim. Voy. Astrolabe, pl. x, fig. 1. (Common Flathead.)

406. P. BASSENSIS, Cuv. and Val. Hist. Nat. Poiss. iv, 1829, p. 247. Rich. Voy. Ereb. and Terr. pl. xviii, fig. 1-2. (Bass Flathead.)

407. P. LÆVIGATUS, Cuv. and Val. Hist. Nat. Poiss. iv, 1829, p. 248. Quoy and Gaim. Voy. Astrolabe, pl. x, fig. 4. (Rock Flathead.)

408. P. ARENARIUS, Rams. and Ogil. P.L.S. N.S.W. x, 1886, p. 577. (Sand Flathead.)

- ~~409.~~ MACRODON, Ogil. P.L.S. N.S.W. x, 1885, p. 226.

410. P. LONGISPINIS, MacL. P.L.S. N.S.W. ix, 1884, p. 170.

411. P. CIRRONASUS, Rich. Voy. Ereb. and Terr. 1848, p. 114, pl. li, fig. 7-10.

### Family TRIGLIDÆ.

LEPIDOTRIGLA. Günth. 1860.

- L. PAPILIO, Cuv. and Val. Hist. Nat. Poiss. iv, 1829, p. 80, pl. lxxiii. (Butterfly Gurnard.)

413. *L. MULHALLI*, MacL. P.L.S. N.S.W. viii, 1884, p. 460.  
Waite, Mem. Aust. Mus. iv, pl. xxii.
414. *L. PLEURACANTHICA*, Rich. Voy. Ereb. and Terr. 1845, p. 23,  
pl. xvi, fig. 1-4.
415. *L. MODESTA*, Waite, Mem. Aust. Mus. iv, 1899, p. 106, pl.  
xxiii.

### CHELIDONICHTHYS, Kaup. 1873.

416. *C. KUMU*, Less. and Garn. Voy. Coquille, 1826, pl. xix.  
McCoy, Prod. Z. Viet. dec. i, pl. 6. (Red Gurnard.)

### PTERYGOTRIGLA, Waite, 1899.

417. *P. POLYOMMATA*, Rich. P.Z.S. 1839, p. 96, and T.Z.S. iii, pl.  
v, fig. 2. (Flying Gurnard.)

## Family CEPHALACANTHIDÆ.

### CEPHALACANTHUS, Lacép. 1802.

418. *C. SPINARELLA*, Lacép. Hist. Nat. Poiss. iii, 1802, p. 323.  
Day, Fish. India, pl. lx, fig. 6. (Flying Gurnard.)

## Acanthopterygii Jugulares.

### Family LEPTOSCOPIDÆ.

#### LEPTOSCOPUS, Gill, 1859.

419. *L. MACROPYGUS*, Rich. Voy. Ereb. and Terr. 1846, p. 55, pl.  
xxxiii, fig. 4-6.

## Family NOTOTHENIIDÆ.

#### PARAPERCIS, Bleek. 1872.

420. *P. NEBULOSUS*, Quoy and Gaim. Voy. Uranie, 1825, p. 349.  
Rich. Icon. Pisc. pl. i, fig 1.
421. *P. OCULARIS*, Waite, Mem. Aust. Mus. iv, 1899, p. 109, pl.  
xxiv.

## NEOPERCIS, Steind. and Doder. 1884.

422. *N. NOVÆ CAMBRIÆ*, Ogil. P.L.S. N.S.W. x, 1885, p. 228.  
Waite, Mem. Aust. Mus. iv, pl. xxv.
423. *N. ALLPORTI*, Günth. A.M.N.H. (4), xvii, 1876, p. 394.
424. *N. BINIVIRGATA*, Waite, Rec. Aust. Mus. v, 1904, p. 236, pl. xxv, fig. 3.

## CENTROPERCIS, Ogil. 1895.

425. *C. NUDEVITTIS*, Ogil. P.L.S. N.S.W. (2), x, 1895, p. 320.  
Waite, Mem. Aust. Mus. iv, pl. xi, fig. 2.

## PSEUDAPHRITIS, Cast. 1872.

426. *P. URVILII*, Cuv. and Val. Hist. Nat. Poiss. viii, 1831, p. 484,  
pl. cexlii. (Tupong.)

## BOVICHTUS, Cuv. and Val. 1831.

427. *B. VARIEGATUS*, Rich. Voy. Ereb. and Terr. 1846, p. 56, pl.  
xxxiv, fig. 1-4.

## Family URANOSCOPIDÆ.

## ANEMA, Günth. 1860.

428. *A. INERME*, Cuv. and Val. Hist. Nat. Poiss. iii, 1829, p. 310,  
pl. lxv. (Star Gazer.)

## KATHETOSTOMA, Günth. 1860.

429. *K. LÆVE*, Bl. Schm. Syst. Ichth. 1801, p. 47, pl. viii. Temm.  
and Schleg. Fauna Japon. pl. x.a. (Stone Lifter.)

## GNATHAGNUS, Gill, 1861.

430. *G. INNOTABILIS*, Waite, Rec. Aust. Mus. v, 1904, p. 238, pl.  
xxvi, fig. 1.

## Family TRICHONOTIDÆ.

CREEDIA, Ogil. 1898.

431. *C. HASWELLI*, Rams. P.L.S. N.S.W. vi, 1881, p. 575. Waite, Mem. Aust. Mus. iv, p. 63, fig. 6.

LIMNICHTHYS, Waite, 1904.

432. *L. FASCIATUS*, Waite, Rec. Aust. Mus. v, 1904, p. 178, pl. xxiii, fig. 4.

SCHIZOCHIRUS, Waite, 1904.

433. *S. INSOLENS*, Waite, Rec. Aust. Mus. v, 1904, p. 242, pl. xxvi, fig. 3.

## Family CALLIONYMICIDÆ.

CALLIONYMUS, Linn. 1758.

434. *C. CALAUROPOMUS*, Rich. Voy. Ereb. and Terr. 1844, p. 10, pl. vii, fig. 4-5. McCoy, Prod. Z. Vict. dec. xx, pl. 192.

435. *C. PAPILIO*, Günth. A.M.N.H. (3), xiv, 1864, p. 197.

436. *C. CURVICORNIS*, Cuv. and Val. Hist. Nat. Poiss. xii, 1837, p. 298. (Stinkfish.)

437. *C. MACLEAYI*, Ogil. Cat. Fish. N.S.W. 1886, p. 37.

438. *C. LUNATUS*, Temm. and Schleg. Fauna Japon. 1845, p. 155, pl. lxxviii, fig. 4.

439. *C. PHASIS*, Günth. Voy. Chall. i, 1850, p. 28, pl. xv, fig. C.

440. *C. REEVESII*, Rich. Voy. Sulphur, 1843, p. 60, pl. xxxvi.

## Family GOBIESOCIDÆ.

DIPLOCREPIS, Günth. 1861.

441. D. COSTATUS, Ogil. P.L.S. N.S.W. x, 1885, p. 270. Waite,  
Rec. Aust. Mus. v, pl. xxiv, fig. 1. (Cling Fish.)

## Family BLENNIIDÆ.

BLENNIUS, Linn. 1758.

442. B. TASMANIANUS, Rich. T.Z.S. iii, 1849, p. 129. (Lempriere's  
Blenny.)
443. B. UNICORNIS, Cast. P.L.S. N.S.W. iii, 1879, p. 384.

LEPIDOBLENNIUS, Steind. 1867.

444. L. GEMINATUS, Macl. P.L.S. N.S.W. vi, 1881, p. 13. (Joey.)

TRIPTERYGION, Risso, 1826.

445. T. ANNULATUM, Rams. and Ogil. P.L.S. N.S.W. (2), ii, 1888,  
p. 1021.
446. T. STRIATICEPS, Rams. and Ogil. P.L.S. N.S.W. (2), iii, 1888.  
p. 419.

CRISTICEPS, Cuv. and Val. 1836.

447. C. NASUTUS, Günth. Cat. Fish. iii, 1861, p. 273.
448. C. AUSTRALIS, Cuv. and Val. Hist. Nat. Poiss. xi, 1836, p. 402,  
pl. ccxxxvi.
449. C. ARGYROPLEURA, Kner, Reise Novara, 1865, p. 199. Waite,  
Mem. Aust. Mus. iv, pl. xi, fig. 3 = 448 ?
450. C. AURANTIACUS, Cast. P.L.S. N.S.W. iii, 1879, p. 386.
451. C. PICTUS, Macl. P.L.S. N.S.W. vi, 1881, p. 25.

## PETRÄITES, Ogil. 1885.

452. *P. HEPTÆOLUS*, Ogil. P.L.S. N.S.W. x, 1885, p. 225.  
 453. *P. WHITELEGGII*, Ogil. P.L.S. N.S.W. ix, (2), 1894, p. 371.  
 454. *P. ROSEUS*, Günth. Cat. Fish. iii, 1861, p. 274.  
 455. *P. ANTINECTES*, Günth. Cat. Fish. iii, 1861, p. 273.

## STICHARIUM, Günth. 1867.

456. *S. DORSALE*, Günth. A.M.N.H. (3), xv, 1867, p. 63.

## PETROSCIRTES, Rüpp. 1828.

457. *P. VARIABILIS*, Cant. Cat. Malay Fish. 1850, p. 200. Day, Fish. India, pl. Ixix, fig. 7.  
 458. *P. ANOLIUS*, Cuv. and Val. Hist. Nat. Poiss. xi, 1836, p. 288.  
 459. *P. GUTTATUS*, Macl. P.L.S. N.S.W. vi, 1881, p. 9.  
 460. *P. ROTUNDICEPS*, Macl. P.L.S. N.S.W. v, 1881, p. 9.  
 461. *P. CRISTICEPS*, Macl. P.L.S. N.S.W. vi, 1881, p. 9.  
 462. *P. WILSONI*, Macl. P.L.S. N.S.W. ix, 1884, p. 171.

## MACRURRHYNCHUS, Ogil. 1896.

463. *M. MAROUBRÆ*, Ogil. P.L.S. N.S.W. xxi, 1896, p. 137.

## XIPHASIA, Swains. 1839.

464. *X. SETIFER*, Swains. Fish. ii, 1839, p. 259. Day, Fish. India, pl. lxxiii, fig. 1.

## PATÆCUS, Rich. 1844.

465. *P. FRONTO*. Rich. A.M.N.H. 1844, xiv, p. 280, and Voy. Ereb. and Terr. pl. xiii.  
 466. *P. MACULATUS*, Günth. Cat. Fish. iii, 1861, p. 292.

## GADOPSIS, Rich. 1848.

467. *G. MARMORATUS*, Rich. Voy. Ereb. and Terr. 1848, p. 122, pl. lix, fig. 6-11. (Slippery.)

## Family BATRACHOIDIDÆ.

BATRACHOIDES, Lacép. 1800.

468. *B. DUBIUS*, Shaw, in White's Voy. N.S.W. 1790, p. 265.  
Rich. Voy. Ereb. and Terr. pl. x.

## Family ZOARCIDÆ (?).

DERMATOPSIS, Ogil. 1896.

469. *D. MACRODON*, Ogil. P.L.S. N.S.W. xxi, 1896, p. 140.

MONOTHRIX, Ogil. 1897.

470. *M. POLYLEPIS*, Ogil. P.L.S. N.S.W. xxii, 1897, p. 88.

## Family OPHIDIIDÆ.

OTOPHIDIUM, Gill, 1885.

471. *O. GENYOPUS*, Ogil. P.L.S. N.S.W. xxii, 1897, p. 93.

## *Acanthopterygii Tæniosomi.*

## Family TRACHYPTERIDÆ.

TRACHYPTERUS, Gouan, 1770.

472. *T. JACKSONENSIS*, Rams. P.L.S. N.S.W. v, 1881, p. 631, pl. xx. McCoy, Prod. Z. Viêt. dec. xiii, pl. 122. (Southern Ribbon Fish.)

REGALECUS, Brünn. 1788.

473. *R. GLENE*, Ascan. Icones Rerum. Nat. ii, 1788, pl. xi. McCoy, Prod. Z. Vict. dec. xv, pl. 145. (Oar Fish.)

## Pediculati.

## Family ANTENNARIIDÆ.

PTEROHYNE, Gill, 1863.

474. *P. HISTRIO*, Linn. Syst. Nat. ed. x, 1758, p. 327. Günth. Fische Südsee, pl. c, fig. A.

## ANTENNARIUS, Lacép. 1798.

475. A. STRIATUS, Shaw, Nat. Misc. v, 1794, pl. clxxv. Günth. Fische Südsee, pl. xcix, fig. B.
476. A. PINNICEPS, Cuv. and Val. Hist. Nat. Poiss. xii, 1837, p. 410. Bleek. Atl. Ichth. v, pl. cxcvii, fig. 5.
477. A. NUMMIFER, Cuv. Mem. Mus. Hist. Nat. iii, 1817, p. 430. Bleek. Atl. Ichth. v, pl. cxcviii, fig. 2.
478. A. COMMERSONII, Cuv. Mem. Mus. Hist. Nat. iii, 1817, p. 431. Bleek. Atl. Ichth. v, pl. cxcvii, fig. 3.

## BRACHIONICHTHYS, Bleek. 1855.

479. B. HIRSUTUS, Lacép. Ann. Mus. Hist. Nat. iv, 1804, p. 202, pl. lv, fig. 3.

**Plectognathi Sclerodermi.**

## Family BALISTIDÆ.

## BALISTES, Linn. 1758.

480. B. VIDUA, Rich. Voy. Sulphur, 1844, p. 128, pl. lix, fig. 9-12. (File Fish.)

## MONACANTHUS, Oken, 1817.

481. M. CHINENSIS, Bloch, Ichty. ii, 1787, p. 29. Bleek. Atl. Ichth. v, pl. ccxxii, fig. 2.
482. M. MEGALOURUS, Rich. Icon. Pisc. 1843, p. 5, pl. i, fig. 3. (Big-tailed Leather Jacket.)
483. M. TOMENTOSUS, Linn. Syst. Nat. ed. x, 1758, p. 328. Bleek. Atl. Ichth. v, pl. ccxx, fig. 1.
484. M. SULCATUS, Holl. Ann. Sci. Nat. ii, 1854, p. 363, pl. xiv, fig. 3. Bleek. Atl. Ichth. v, pl. ccxxii, fig. 1.
485. M. FILICAUDA, Günth. Voy. Chall. i, 1880, p. 50, pl. xxiii, fig. D.

## STEPHANOLEPIS, Gill, 1861.

486. S. NITENS, Holl. Ann. Sci. Nat. (4), ii, 1854, p. 364, pl. xiv, fig. 4.

## PSEUDOMONACANTHUS, Bleek. 1866.

487. *P. HIPPOCREPIS*, Quoy and Gaim. Voy. Uranie, 1824, p. 212. McCoy, Prod. Z. Vict. dec. xiii, pl. 125. (Variable Leather Jacket.)
488. *P. FREYCINETI*, Cuv. in Quoy and Gaim. Voy. Uranie, 1824, p. 213. Holl. Ann. Sci. Nat. (4), ii, pl. xii, fig. 3.
489. *P. TRACHYLEPIS*, Günth. Cat. Fish. viii, 1870, p. 248.
490. *P. SETOSUS*, Waite, Mem. Aust. Mus. iv, 1899, p. 91, pl. xvi.
491. *P. CONVEXIROSTRIS*, Günth. Cat. Fish. viii, 1870, p. 248.
492. *P. RUDIS*, Rich. P.Z.S. 1840, p. 27, and Voy. Ereb. and Terr. pl. xl, fig. 7-8.
493. *P. GÜNTHERI*, MacL. P.L.S. N.S.W. vi, 1881, p. 314.
494. *P. SPILOMELANURUS*, Quoy and Gaim. Voy. Uranie, 1824, p. 217. Rich. Voy. Ereb. and Terr. pl. xxxix, fig. 1-4.
495. *P. MACULOSUS*, Rich. P.Z.S. 1840, p. 28, and Voy. Ereb. and Terr. pl. xxxix, fig. 5-7. (Speckled Leather Jacket.)
496. *P. CASTELNAUI*, MacL. P.L.S. N.S.W. vi, 1881, p. 316.
497. *P. MOSAICUS*, Rams. and Ogil. P.L.S. N.S.W. (2), i, 1886, p. 5. Waite, Mem. Aust. Mus. iv, pl. xvii, fig. 1.
498. *P. PRASINUS*, Cast. P.Z.S. Vict. i, 1872, p. 205.
499. *P. GRANULATUS*, Shaw, in White's Voy. N.S.W. 1790, p. 295. Rich. Voy. Ereb. and Terr. pl. xl, fig. 1-2.
500. *P. AYRAUDI*, Quoy and Gaim. Voy. Uranie, 1824, p. 216, pl. xlvi, fig. 2. (Common Leather-jacket.)

## CHÆTODERMIS, Swains. 1839.

501. *C. PENICILLIGERUS*, Cuv. Règne. Anim. (ed. 2), ii, 1829, p. 374. Bleek. Atl. Ichth. v, pl. cxxxi, fig. 3.

## BRACHALUTERES, Bleek. 1866.

502. *B. TROSSULUS*, Rich. Voy. Ereb. and Terr. 1846, p. 68, pl. xl, fig. 5-6.

## ALUTERA, Oken, 1817.

503. *A. MACULICAUDA*, Ogil. Cat. Fish. N.S.W. 1886, p. 64.

## Family OSTRACIONTIDÆ.

LACTOPHRYS, Swains. 1839.

504. *L. CONCATENATUS*, Bloch, Ichty. iv, 1785, p. 101, pl. cxxxii.

OSTRACION, Linn. 1758.

505. *O. DIAPHANUM*, Bl. Sehn. Syst. Ichth. 1801, p. 501. Bleek. Atl. Ichth. v, pl. ccii, fig. 2.

506. *O. CORNUTUM*, Linn. Syst. Nat. ed. x, 1758, p. 331. Bleek. Atl. Ichth. v, pl. ccii, fig. 3.

ARACANA, Gray, 1838.

507. *A. LENTICULARIS*, Rich. P.Z.S. 1841, p. 21. Waite, Mem. Aust. Mus. iv, pl. xviii.

## Plectognathi Gymnodontes.

### Family TETRAODONTIDÆ.

SPHÆROIDES, Dum. 1806.

508. *S. INERMIS*, Temm. and Schleg. Fauna Japon. 1850, p. 278, pl. cxxii, fig. 2.

509. *S. SCELERATUS*, Gmel. Syst. Nat. ed. xiii, 1789, p. 1444. Bleek. Atl. Ichth. v, pl. ccix, fig. 1.

510. *S. LUNARIS*, Bl. Sehn. Syst. Ichth. 1801, p. 505. Bleek. Atl. Ichth. v, pl. ccv, fig. 2.

511. *S. OBLONGUS*, Bloch, Ichty. v, 1786, p. 6. Bleek. Atl. Ichth. v, pl. ccviii, fig. 4.

512. *S. RICHEI*, Frémin. Nouv. Bull. Philom. ii, p. 250, pl. iv, fig. 2. Bleek. Atl. Ichth. v, pl. cexiii, fig. 3.

513. *S. HAMILTONI*, Rich. Voy. Ereb. and Terr. 1846, p. 63, pl. xxxix, fig. 10-11. (Toado.)

514. *S. AMABILIS*, Cast. P.L.S. N.S.W. iii, 1879, p. 401.

## TETRAODON, Linn. 1758.

515. *T. IMMACULATUS*, Bl. Schn. Syst. Ichth. 1801, p. 507. Day, Fish. India, pl. clxxxiii, fig. 4.
516. *T. HISPIDUS*, Linn. Syst. Nat. ed. x, 1758, p. 333. Bleek. Atl. Ichth. v, pl. ccv, fig. 3.
517. *T. FIRMAMENTUM*, Temm. and Schleg. Fauna Japon. 1850, p. 280, pl. cxxvi, fig. 2.
518. *T. HYPSELOGENEION*, Bleek. Nat. Tijd. Ned. Ind. iii, 1852, p. 300, and Atl. Ichth. v, pl. cexiii, fig. 5.
519. *T. STELLATUS*, Bl. Schn. Syst. Ichth. 1801, p. 503. Bleek. Atl. Ichth. v, pl. cexii, fig. 1.
520. *T. ERYTHROZENIA*, Bleek. Nat. Tijds. Ned. Ind. v, 1853, p. 174, and Atl. Ichth. v, pl. cexiv, fig. 4.
521. *T. AURANTIAS*, Ogil. Rec. Aust. Mus. i, 1890, p. 81.

## Family DIODONTIDÆ.

## DIODON, Linn. 1758.

522. *D. HYSTRIX*, Linn. Syst. Nat. ed. x, 1758, p. 335. Bleek. Atl. Ichth. v, pl. cevii, fig. 2.
523. *D. HOLACANTHUS*, Linn. Syst. Nat. ed. x, 1758, p. 335. Bleek. Atl. Ichth. v, pl. cexii, fig. 2.

## DICOTYLICHTHYS, Kaup, 1855.

524. *D. PUNCTULATUS*, Kaup, Weigm. Arch. 1855, p. 230. Waite, Mem. Aust. Mus. iv, pl. xix.
525. *D. JACULIFERUS*, Cuv. Mem. Mus. Hist. Nat. iv, 1818, p. 130, pl. vii.

## Family MOLIDÆ.

## MOLA, Linck, 1790.

526. *M. MOLA*, Linn. Syst. Nat. ed. x, 1758, p. 334. Temm. and Schleg, Fauna Japon. pl. cxxvii. (Sun Fish.)

## EDIBLE FISHES.

48	76	151	188	234	263	310	340	392
49	83	153	189	237	264	311	342	395
51	98	157	190	238	269	321	345	396
53	123	158	191	239	270	323	349	401
55	124	166	198	242	272	324	354	405
56	126	171	199	244	282	326	356	407
57	127	179	206	247	301	330	357	416
64	130	182	212	248	302	331	360	467
71	142	183	227	249	303	333	365	487
72	144	186	228	261	305	335	367	489
73	149	187	233	262	306	339	370	500

---

## INTRODUCED SPECIES.

### Family SALMONIDÆ.

*SALMO FARIO*, Linn. Syst. Nat. ed. x, 1758, p. 309. (Brown Trout.)

*SALMO IRIDEUS*, Gibbons, Proc. Cal. Acad. Nat. Sci. 1855, p. 36.  
(Californian Rainbow Trout.)

*SALVELINUS FONTINALIS*, Mitchell, Trans. Lit. and Phil. Soc. N. York, i, 1815, p. 435. (American Brook Trout.)

### Family CYPRINIDÆ.

*CARASSIUS AURATUS*, Linn. Syst. Nat. ed. x, 1758, p. 322. (Gold-fish.)

*TINCA TINCA*, Linn. Syst. Nat. ed. x, 1758, p. 321. (Tench.)

### Family PERCIDÆ.

*PERCA FLUVIATILIS*, Linn. Syst. Nat. ed. x, 1758, p. 289. (Perch.)

---

NOTE.—Though referred to, under numbers 371-378, the "Rec. Aust. Mus. v, pt. 5, 1904," now in the press, will not be ready for publication until after the present Catalogue has been issued.

## INDEX TO GENERA.

---

Page	Page
ACANTHISTIUS .....	27
ACHIRUS .....	44
ACHERODUS .....	38
AETOBATIS .....	11
AGONOSTOMUS .....	23
ALECTIS .....	41
ALEPISaurus .....	17
ALOPIAS .....	8
ALUTERA .....	56
AMMOTRETIS .....	44
ANEMA .....	50
ANGUILLA .....	15
ANTENNARIUS .....	55
ANTHIAS .....	28
APHAREUS .....	33
APLOACTIS .....	48
APLODACTYLUS .....	32
APOGON .....	30
APOGONICHTHYS .....	30
APOGONOPS .....	30
ARACANA .....	57
ARRHAMPHUS .....	20
ARRIPIS .....	30
ASERAGGODES .....	44
ATHERINA .....	21
ATOPICHTHYS .....	15
ATYPICHTHYS .....	35
AULOPUS .....	17
AUSTROPHYCIS .....	24
BALISTES .....	55
BASCANICHTHYS .....	16
BATRACHOIDES .....	54
BERYX .....	25
BLENNIUS .....	52
BOVICHTUS .....	50
BRACHALUTERES .....	56
BRACHIONICHTHYS .....	55
BRAMA .....	43
BRANCHIOSTOMA .....	5
CÆSIOPERCA .....	28
CALLANTHIAS .....	28
CALLIONYMUS .....	51
CAPRODON .....	28
CARANX .....	41
CARASSIOPS .....	45
CARASSIUS .....	59
CARCHARIAS .....	7
CARCHARODON .....	8
CATULUS .....	6
CENTROPERCIS .....	50
CENTROPOGON .....	47
CEPHALACANTHUS .....	49
CEPOLA .....	31
CETORHINUS .....	8
CHÆTODERMIS .....	56
CHÆTODON .....	35
CHANDA .....	29
CHANOS .....	12
CHEILOBRANCHUS .....	14
CHEILODACTYLUS .....	32
CHELIDONICHTHYS .....	49
CHELMONOPS .....	35
CHIMERA .....	11
CHIROCENTRUS .....	12
CHIRONEMUS .....	32
CHIROSTOMA .....	21
CHLOROPHTHALMUS .....	17
CHIROPSPS .....	38
CHROMIS .....	37
CHRYSOPHRYNS .....	34

Page	Page
CIRRHITICHTHYS .....	30
CLUPANODON .....	13
CNIDOGLANIS .....	14
CONGERMURÆNA .....	15
COPIDOGLANIS .....	14
CORIS .....	39
CORYPHÆNA .....	43
CREEDIA .....	51
CRISTICEPS .....	52
CYNOSCIÖN .....	31
CYPSILURUS .....	21
CYTUS .....	43
DACTYLOSPARUS .....	32
DASYATIS .....	11
DECAPTERUS .....	41
DERMATOPSIS .....	54
DIASTODON .....	38
DICOTYLICHTHYS .....	58
DINOLESTES .....	30
DIODON .....	58
DIPLOCREPIS .....	52
DOROSOMA .....	12
ECHENEIS .....	46
ECHIDNA .....	16
ELOPS .....	12
ENGRAULIS .....	13
ENOPLOSUS .....	29
EPHIPPUS .....	36
EPINEPHELUS .....	27
ETELIS .....	29
ETRUMEUS .....	12
EUPETRICHTHYS .....	39
EXOCETUS .....	21
FISTULARIA .....	18
GADOPSIS .....	53
GALAXIAS .....	16
GALEICHTHYS .....	14
GALEOCERDO .....	7
GASTEROTOKEUS .....	19
GENYOROGE .....	28
GERRES .....	32
GILLICHTHYS .....	46
GIRELLA .....	26
GLAUCOSOMA .....	29
GLYPHISODON .....	37
GLYPTAUCHEN .....	47
GNATHAGNUS .....	50
GNATHYPOPS .....	30
GOBIOIDES .....	46
GOBIOMORPHUS .....	45
GOBIUS .....	45
GONORHYNCHUS .....	13
GOXIISTIUS .....	32
GUENTHERIA .....	39
GYMNOSARDA .....	42
GYMNOTHORAX .....	16
HARPE .....	37
HELOTES .....	33
HEMIRAMPHUS .....	20
HEMISCYLLIUM .....	6
HETEROCHÆROPS .....	37
HETERODONTUS .....	6
HETEROSCARUS .....	40
HIPPOCAMPUS .....	19
HISTIOPTERUS .....	33
HYPERLOPHUS .....	13
HYPNOS .....	10
HYPOPLECTRODES .....	27
HYPORHAMPHUS .....	20
ICHTHYOCAMPUS .....	18
Iso .....	21
ISUOPSIS .....	8
KATHETOSTOMA .....	50
KREFFTIIUS .....	45
KUHLIA .....	25
KYPHOSUS .....	26
LACTOPHRYNS .....	57
LÆOPS .....	44
LATRIS .....	32
LEPIDOBLENNIUS .....	52
LEPIDOTRIGLA .....	48
LEPTOCEPHALUS .....	15
LEPTOSCOPEUS .....	49
LETHRINUS .....	34
LIMNICHTHYS .....	51
LOBOTES .....	26
LOPHONECTES .....	44
LOTELLA .....	24
LUTIANUS .....	29
LUVARUS .....	43

Page	Page
MACQUARIA .....	27
MACRORHAMPHOSUS .....	18
MACRURRHYNCHUS .....	53
MANTA .....	11
MEGALOPS .....	12
MELANOTÄENIA .....	22
MOGURnda .....	45
MOLA .....	58
MONACANTHUS .....	55
MONODACTYLUS .....	36
MONOCENTRIS .....	25
MONOTHRIX .....	54
MORDACIA .....	5
MUGIL .....	22
MURÆNICHTHYS .....	15
MURÆNESOX .....	15
MUSTELUS .....	7
MYLIOBATIS .....	11
MYROPHIS .....	15
MYXUS .....	23
NANNOCAMPUS .....	19
NANNOPERCA .....	29
NARCINE .....	10
NAUCRATES .....	40
NÉOPERCIS .....	50
NOMEUS .....	24
NOTESTHES .....	47
NOTORHYNCHUS .....	5
NOVACULICHTHYS .....	39
ODAX .....	40
ODONTASPIS .....	8
OLIGORUS .....	27
OLISTHOPS .....	49
OPHISURUS .....	16
OPHTHALMOLEPIS .....	39
ORECTOLOBUS .....	6
OSTRACION .....	57
OTOPHIDIUM .....	54
PAGROSOMUS .....	34
PARALICHTHYS .....	43
PARAPERCIS .....	49
PARAPLESIOPS .....	28
PARASCYLLIUM .....	6
PARATRACHICHTHYS .....	25
PARMA .....	37
PATÆCUS .....	53
PEGASUS .....	20
PEMPHERIS .....	25
PENTACEROPSIS .....	33
PENTAPUS .....	33
PENTAROGE .....	48
PERCA .....	59
PERCALATES .....	26
PETRAITES .....	53
PETROSCIRTES .....	53
PHILYPNODON .....	45
PHYLLOPTERYX .....	19
PHYSICULUS .....	24
PLATAx .....	36
PLATOPHRYS .....	44
PLATYCEPHALUS .....	48
PLECTROPLITES .....	26
PLOTOSUS .....	14
POLYDACTYLUS .....	23
POMACENTRUS .....	37
POMADASIS .....	33
POMATOMUS .....	41
POTAMALOSA .....	13
PRIACANTHUS .....	28
PRIONACE .....	7
PRIONURUS .....	36
PRISTIOPHORUS .....	9
PRISTIS .....	9
PROMICROPS .....	27
PROTOTROCTES .....	17
PSENES .....	24
PSEUDAPHRITIS .....	50
PSEUDOLABRUS .....	38
PSEUDOMONACANTHUS .....	56
PSEUDOMUGIL .....	21
PTEROphryne .....	54
PTEROPLATEA .....	11
PTEROIS .....	47
PTERYGOTRIGLA .....	49
RACHYCENTRON .....	41
RAJA .....	10
REGALECUS .....	54
REMORA .....	46
RETROPINNA .....	13
RHINOBATUS .....	9

Page	Page
RHOMBATRACTUS .....	22
RHYNCHOBATUS .....	9
SALMO .....	59
SALVELINUS .....	59
SARDA .....	42
SARDINELLA .....	13
SAURIDA .....	17
SCHEDOPHILUS .....	24
SCHIZOCHIRUS .....	51
SCLÆNA .....	31
SCOMBER .....	42
SCOMBEROIDES .....	40
SCOMBEROMORUS .....	42
SCOMBRESOX .....	21
SCORPÆNA .....	47
SCORPIS .....	35
SEBASTAPISTES .....	46
SEBASTODES .....	47
SEBASTOPSIS .....	47
SERIOLA .....	40
SERIOLELLA .....	24
SIGANUS .....	36
SILLAGO .....	31
SOLEA .....	44
SOLEGNATHUS .....	19
SPHÆROIDES .....	57
SPHYRÆNA .....	23
SPHYRNA .....	7
SQUALUS .....	8
SQUATINA .....	9
STEGOSTOMA .....	6
STEPHANOLEPIS .....	55
STICHIARIUM .....	53
STIGMATOPORA .....	19
STOLEPHORUS .....	12
SYMPHURUS .....	44
SYNAPTURA .....	44
SYNGNATHUS .....	18
TEPHREOPS .....	26
TERAPON .....	33
TETRAGONURUS .....	23
TETRAODON .....	58
TETRAPTURUS .....	42
TEUTHIS .....	36
THYRSITES .....	42
TINCA .....	59
TRACHICHTHYS .....	25
TRACHINOCEPHALUS .....	17
TRACHINOPS .....	28
TRACHINOTUS .....	41
TRACHURUS .....	41
TRACHYPTERUS .....	54
TRACHYSTOMA .....	22
TRICHIURUS .....	42
TRIPTYERYGION .....	52
TROCHOCOPUS .....	37
TRYGONOPTERA .....	10
TRYGONORRHINA .....	9
TYLOSURUS .....	20
UPENEUS .....	34
UROCAMPUS .....	19
UROLOPHUS .....	10
XESURUS .....	36
XIPHASIA .....	53
XYSTEMA .....	31
ZEUS .....	43

S. D. TOWNSEND & CO.,  
PRINTERS,  
282 PITT STREET,  
SYDNEY.







SMITHSONIAN INSTITUTION LIBRARIES



3 9088 00315597 5

nh QH1.N2855

no. 1 Memoirs of the New South Wales Na

SMITHSONIAN INSTITUTION LIBRARIES

3 9088 00315598 3

nh QH1.N2855

no. 2 Memoirs of the New South Wales Na